

UNITED STATES OF AMERICA 77 FERC 61,204  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Elizabeth Anne Moler, Chair;  
Vicky A. Bailey, James J. Hoecker,  
William L. Massey, and Donald F. Santa, Jr.

Pacific Gas and Electric Company, )  
San Diego Gas & Electric Company and ) Docket Nos. EC96-19-000  
Southern California Edison Company ) and ER96-1663-000

ORDER CONDITIONALLY AUTHORIZING ESTABLISHMENT OF AN  
INDEPENDENT SYSTEM OPERATOR AND POWER EXCHANGE, CONDITIONALLY  
AUTHORIZING TRANSFER OF FACILITIES TO AN INDEPENDENT  
SYSTEM OPERATOR, AND PROVIDING GUIDANCE

(Issued November 26, 1996)

I. Introduction

On April 29, 1996, Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SoCal Edison) (collectively, the Companies) filed in Docket No. EC96-19-000 a Joint Application for Authorization to Convey Operational Control of Designated Jurisdictional Facilities to an Independent System Operator (ISO). Also on that date, the Companies filed in Docket No. ER96-1663-000 a Joint Application for Authority to Sell Electric Energy at Market-Based Rates Using a Power Exchange (PX). As discussed below, we will grant certain of the requested authorizations on a preliminary basis, with the conditions and modifications detailed herein, direct the Companies to file the Phase II portion of their restructuring proposal by March 31, 1997, and provide guidance to the Companies on the information the Commission requires for the Phase II filing. The Commission will not in this order address the Companies' market power analyses or their bidding and pricing proposals under the PX. The Commission will defer consideration of these issues until another order to be issued in the near future.

II. Background

The April 29 filings were filed by the Companies at the direction of the Public Utilities Commission of the State of California (California Commission) to implement the first phase of the California Commission's and the California Legislature's decisions for restructuring the electric utility industry in

California (Phase I filings). 1/ The Companies state that subsequent filings (Phase II filings) will contain further detail on the restructuring proposal, including changes needed to reflect the Restructuring Legislation.

The Commission convened technical conferences on August 1, 1996 and September 12-13, 1996. During the September 12-13 technical conference, the Companies indicated that due to the Restructuring Legislation, an amendment to their Phase I filings may be necessary. 2/

Concurrently with the PX filing, the Companies filed in Docket No. EL96-48-000 a petition for a declaratory order approving the Companies' proposed classifications of their facilities as Commission-jurisdictional transmission facilities or state-jurisdictional local distribution facilities. By order issued on October 30, 1996, the Commission granted the petition with two minor modifications. 3/

#### Requested Authorizations

In these proceedings, the Companies request approval of their overall framework for establishing the ISO and PX. PG&E and SoCal Edison request Commission approval based on the applications. Initially, SDG&E stated that it supported the great bulk of the applications but dissented on certain technical

- 1/ See California Commission Decision D.95-12-063 (Dec. 20, 1995), modified by, D.96-01-009 (Jan. 10, 1996) and D.96-03-22, 166 P.U.R. 4th 1 (California Commission Decision); Assembly Bill 1890, signed by Governor Wilson on September 23, 1996 (Restructuring Legislation).
- 2/ On September 20, 1996, the Commission issued a Notice of Revised Procedures, directing the Companies to file any amendments to their filings related to the Restructuring Legislation within 14 days after the Governor signs the legislation. The notice also directed parties to these proceedings to file comments no later than 14 days after the date of filing of any amendments. The notice also provided that comments on the California Commission's Supplemental Comments would be due on the same date as comments on any amendments. Pacific Gas & Electric Company, et al., 76 FERC 61,308 (1996). The Companies filed a Joint Statement of Applicants and Indicated Intervenor On Implementation of California Legislation on October 7, 1996.
- 3/ Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company, 77 FERC 61,077 (1996).

aspects of the ISO and PX. As discussed below, SDG&E subsequently withdrew its dissenting proposals.

The Companies assert that these authorizations are required to draft and negotiate the bylaws of the ISO and PX, the contracts that will govern the relationships between the market participants and these new structures, the protocols by which the ISO will operate the transmission system and perform certain dispatch functions and by which the PX will create the day-ahead and hour-ahead auctions, and the tariffs for transmission service. The Companies anticipate making their Phase II filing for approval of these bylaws, contracts, protocols and tariffs in early 1997.

The Companies seek authorization to commence ISO and PX operations and to begin market-based sales through the PX commencing January 1, 1998. 4/ In support, of their market-based rate request, the Companies have filed supplemental information concerning market power issues.

#### California Electric Industry Restructuring

The California Commission Decision sets forth its framework for restructuring the electric power industry in California. The California Commission Decision requires, inter alia:

- (1) the transfer of operating control over all of the Companies' transmission assets to an ISO which will operate those combined assets as a single, state-wide grid;
- (2) the creation of a power exchange, described below, which would facilitate the creation of a transparent, visible spot market for electric generation;
- (3) a phase-in of physical retail direct access to commence in 1998, whereby existing utility retail customers would be permitted to take generation supply service from other sellers;
- (4) a mechanism (virtual direct access) for retail customers to avail themselves of the benefits of the hourly spot market without engaging in physical direct access;
- (5) the determination that the Companies are entitled to impose a competition transition charge (CTC) to

4/ They state that if it is possible to begin PX operations at an earlier date, they will submit a supplemental filing to request an earlier effective date.

recover stranded costs as a result of the shift to the new market structure; 5/ and (6) the treatment of certain categories of generation assets, labelled as "must take" resources, which would not be required to participate in the PX auction in order to run, but would be scheduled with the ISO on a "must take" basis. 6/

The Companies state that the California Commission Decision set forth broad criteria and objectives for the establishment of the PX: (1) the PX will have no financial interest in any source of generation; (2) the PX will have no ownership ties to the ISO; (3) the PX will meet the needs of California customers with loads not being served under direct access contracts; (4) the PX will function as a clearinghouse by conducting a transparent auction with hourly price signals visible to all market participants; and (5) the Companies initially will be required to bid a portion of their generation into the PX and satisfy their need for electric energy on behalf of their utility service customers with purchases through the PX.

Recognizing that the sale of electric energy for resale through the PX will be subject to this Commission's jurisdiction, the California Commission directed the Companies to work together to develop a proposal to implement the PX and to apply for this Commission's authorization to make market-based wholesale sales through the PX. 7/ The California Commission ordered that the PX be implemented by January 1, 1998.

The Companies state that the development of the PX is conditioned on approval by the Commission and implementation of the ISO in a form satisfactory to the Companies. They state that the PX cannot function effectively without the ISO, because the PX bidders will depend on the ISO for non-discriminatory transmission access, real-time balancing of load and generation resources, and maintenance of system reliability. They describe

- 5/ The CTC would be primarily collected at the retail level and would be non-bypassable. All retail customers as of December 20, 1995, would be responsible for paying these charges, whether they remain utility service customers, elect to become direct-access customers, or pursue other options.
- 6/ These resources are all pre-existing power purchase contracts, qualifying facilities, hydro spill, and nuclear facilities.
- 7/ The Companies established a formal structure, the Western Power Exchange (WEPEX), to implement the California Commission's objectives.

the PX as an auction, settlement, and billing entity that has the operational responsibilities of a scheduling coordinator.

Overview of the Proposed ISO In Docket No. EC96-19-000

In Docket No. EC96-19-000, the Companies request authorization pursuant to section 203 of the Federal Power Act (FPA) 8/ to transfer operational control (but not ownership) of certain transmission facilities to an ISO. The Companies also request approval of the proposed governance and structure of the ISO, the manner in which the ISO will operate, and the transmission access and pricing rules that will govern service over the ISO grid, as set forth in the filing. 9/

Specifically, the Companies propose to transfer to the ISO facilities that are part of the integrated transmission network; that are required by the ISO to manage transmission congestion effectively; and that are not local distribution facilities. 10/ The Companies state that the facilities they designated as transmission in their Petition for a Declaratory Order in Docket No. EL96-48-000 would meet this standard.

With the transfer of operational control, the ISO will assume responsibility for control area operations now being performed by the Companies, and will be obligated, at a minimum, to meet Western Systems Coordinating Council's (WSCC), North American Electric Reliability Council's (NERC) and each company's specific reliability requirements and operating guidelines. 11/ The ISO's control area will comprise, at a minimum, of the three control areas now operated separately by the Companies. The ISO will be responsible for second-to-second balancing of generation and load while ensuring the safe and reliable operation of the transmission system. To fulfill this responsibility, the ISO will be required to perform grid management under normal operating conditions and during system emergencies and to coordinate equipment outages and maintenance.

8/ 16 U.S.C. 824b (1994).

9/ Although SDG&E initially dissented from certain elements of the ISO filings, as described in Appendix G to the filing, it subsequently filed a Notice of Withdrawal of that Appendix and other items, as discussed below.

10/ Joint Application for Authorization to Convey Operational Control of Designated Jurisdictional Facilities to an Independent System Operator in Docket No. EC96-19-000 (ISO Application) at 13-17.

11/ See ISO Application at 44.

The ISO will have exclusive authority to direct not only transmission facilities, but all facilities that affect the reliability of the transmission grid. 12/ Under the Companies' proposed framework, the Companies, and all other transmission customers, will be obligated to carry out orders given by the ISO in order to maintain system reliability. In order to fulfill its obligations, the ISO will continuously monitor and control the system through Energy Management System (EMS) computers, telecommunications equipment, and System Control and Data Acquisition (SCADA) equipment. The ISO will have the ability to commit and control the output of certain "reliability must-run" generating units required for local reliability. In addition, the ISO will control the output of generation that is to provide ancillary services or to redispatch to eliminate congestion. Finally, the ISO will administer a Transmission System Information Network, or OASIS, that the Companies assert will satisfy the Commission's requirements. 13/

The Companies state that the proposed transfer of operational control of transmission facilities to the ISO is in the public interest because it will ensure open, non-discriminatory transmission access over the Companies' transmission systems to all market participants; promote the efficient use and expansion of transmission facilities; ensure reliable operation of the Companies' transmission systems; and provide a necessary element of the California Commission's restructuring plan. 14/

The application provides that operational control of the ISO will encompass the following elements:

- \* The ISO will administer tariffs ensuring open and non-discriminatory access to the transmission facilities within its control (the ISO grid);
- \* The ISO will have sole authority to direct the operation of all facilities in the ISO grid that affect the reliability of the transmission system. This control will be in accordance with the NERC, WSCC and transmission owner specific reliability criteria as well as operating guidelines of the individual transmission owners. The transmission owners will carry out operating orders from the ISO to perform the physical operation of the system. Similarly, generation equipment required for reliability would be subject to ISO operating orders, unless compliance with

12/ Id. at 45.

13/ Id. at 47 and 62.

14/ Id. at 8.

- such orders would impair public health or safety or would damage facilities;
- \* Except in emergencies, the ISO will approve requests to remove transmission equipment from service and return facilities to service before the transmission owners may do so; and
- \* The ISO will establish priorities and the order for returning transmission and generation facilities to service following an emergency.

The Companies propose to transfer the operational control of the ISO grid facilities under contracts, tariffs and protocols to be filed with the Commission in Phase II, subject to certain conditions. 15/ The transfer would also include the sale or lease of related dispatch control facilities to the ISO. 16/

A. The ISO Governance Structure

As proposed, the ISO would be a non-profit, public benefit California corporation, subject to the Commission's jurisdiction. The Companies propose a broad based, flexible governance structure. 17/ Specifically, the Companies propose to establish an ISO Governing Board consisting of 15-18 members, 18/ selected from the following five classes: 19/

15/ These conditions relate to the assurances the Companies receive that they will fully recover their transition costs and that they receive all regulatory approvals necessary to implement the California Commission's restructuring orders. Moreover, after the expiration of these tariffs and contracts, the facilities would revert to the Companies, subject to regulatory approval.

16/ The specific facilities have not yet been fully identified, and their transfer would be subject to the California Commission's approval, and this Commission's approval to the extent that the facilities are Commission-jurisdictional, according to the Companies.

17/ See ISO Application at 17-20.

18/ The number depends in part on the number of transmission owners agreeing to provide operational control of their facilities to the ISO.

19/ See ISO Application at 20-28.

IOU Transmission Owners (3-4 members);  
Governmental/Municipal (3-4 members);  
Sellers (3 members);  
Endusers (4 members); and  
Non-Stakeholders/Public (2-3 members limited to two  
staggered terms each). 20/

Each class would elect its own Governing Board members, which would serve three-year terms. As proposed, market participants may not participate in more than one class and all Governing Board members may vote individually without regard to class. The Companies assert that their proposal reflects two overriding principles: (1) no one class should be able to block or veto an action; and (2) no two classes should be able to vote together to form a sufficient majority to make decisions. Thus, no particular interest would be dominant, according to the Companies. The filing indicates that the Governing Board would be required to file with the Commission after the first three years of ISO operation, and every five years thereafter, a proposal recommending any necessary modifications to the class structure.

The Companies propose that two-thirds of the Governing Board members would form a quorum, and most actions would require a two-thirds vote of the quorum present. Some significant votes such as dissolution or removal of a Board member would require an 80% majority vote. The filing indicates that the bylaws will include some open meeting requirements. 21/

The ISO Governing Board would be responsible for major ISO decisions. For example, the Governing Board would review and establish policies to assure the independent operation of the ISO and compliance with all requirements for reliable and economic operation of the ISO grid. Board actions would include determining whether or when to apply to the Commission for changes in terms and conditions of the ISO's tariff or structural changes to the ISO; enforcing and implementing changes to ISO procedures, contracts, and agreements; determining and resolving reliability issues related to the ISO grid; interpreting standards for market participation; and determining staff needs to perform ISO functions. The Governing Board would not perform daily ISO functions. In addition to the Audit and Arbitration Committees described below, the Governing Board would have the authority to establish subordinate advisory committees. 22/

20/ As discussed below, the Restructuring Legislation provides for a slightly different board composition.

21/ Id. at 28-29.

22/ Id. at 29-30.



The ISO would have an Audit Committee, which would direct and review audits and reports, provide analysis and advice to the Governing Board, help the Chief Executive Officer (CEO) prepare the annual budget and other financial documents, and oversee conflict of interest standards in the ISO bylaws.

The ISO would also have an Arbitration Committee, which would perform the Governing Board's dispute resolution function. More specifically, the ISO would utilize alternative dispute resolution (ADR) procedures, with rights to appeal to the Commission regarding ISO Board decisions. Where a dispute between a market participant and the ISO staff arises, the Arbitration Committee would screen the dispute, subject to the market participants' agreement, to determine whether it may be resolved by Governing Board action without proceeding to other procedural steps. 23/

As detailed in Section 5.2.3 and Appendix B of the ISO Application, 24/ the ISO ADR process would involve four primary steps and specified time limits:

1. informal resolution;
2. mediation/facilitation;
3. arbitration by an arbitrator selected from a list maintained by the Arbitration Committee, using a "baseball" type arbitration (all disputants submit their best offer and the arbitrator chooses one offer without crafting compromises); and
4. compliance or appeal to the Commission. 25/

The Companies describe this process as similar to that utilized by the Western Regional Transmission Association (WRTA)

The ISO's CEO would be hired by the Governing Board, would oversee the ISO's responsibilities on a real time basis, would manage the ISO, would provide operating instructions in emergencies, and would implement minor changes to ISO procedures.

23/ Id. at 31-32.

24/ Id. at 35 and Appendix B.

25/ Appeals to the Commission would be limited to grounds that the arbitration award is either (1) unjust, unreasonable unduly discriminatory or preferential; or (2) contrary to or beyond the scope of the ISO bylaws or a specific implementing contract. Moreover, the Commission would defer to the arbitrator's findings of fact.

Moreover, the bylaws will specify conditions under which Governing Board matters may be delegated to the CEO. 26/

The ISO would be authorized to hire staff and contractors to carry out the day to day functions of the ISO. The Companies indicate that the ISO bylaws will provide for the ISO Governing Board to develop and adopt by the date ISO operations commence, a long term ISO staffing plan which provides for staff independence, continuity of dispatch, and cost effectiveness of operations. Prior to the commencement of ISO operations, there is likely to be a transition period during which transmission owner staff will have to be hired by the ISO to ensure continuity of dispatch operations experience and availability of specialized expertise. However the ISO bylaws would require the Governing Board to adopt standards for the use of transmission owner employees during this transition period to ensure that such staff are limited to transition functions and to maintain the independence of the ISO. 27/

As proposed, the bylaws also would establish conflict of interest standards for Governing Board members, staff and consultants. Staff and consultants would have to be independent of the interests and outcome of the competitive electricity market. 28/

The filing also provides that initial capitalization of the ISO would be needed to reimburse development costs and to acquire and lease assets to run the ISO. Until the ISO is approved, the Companies plan to file with the California Commission to recover development costs from their customers. The funds would be transferred to a trust. Once the ISO is approved, it will seek external financing to reimburse these costs, and will recover the costs through an administrative charge to ISO grid users, to the extent allowed under existing contracts. 29/

The ISO's relationship with other market entities would be established based on "ISO/PX Implementing Agreements" consisting of the FERC-approved tariff for ISO operation, the rules, protocols and procedures the ISO adopts, agreements between the ISO and other market participants. The Companies state their intention to standardize, to the extent possible, agreements between the ISO and market participants. The ISO will operate its own control area. It will therefore maintain the same type

26/ See ISO Application at 30-31.

27/ Id. at 32-34.

28/ Id. at 34.

29/ Id. at 34-35.

of relationship that the Companies currently have with other control areas in the WSCC. 30/

B. ISO Operational Framework

The Companies identify five basic functional categories applicable to the ISO's function as a system operator: 31/

1. Scheduling

The Companies propose that the ISO will establish scheduling protocols which will define the daily timetable for submitting schedules and related information to the ISO for a day-ahead and hour-ahead market, and for coordinating a real-time balancing market. 32/ The ISO also will establish protocols to certify "scheduling coordinators" who may submit schedules to the ISO. The PX would be a scheduling coordinator. Scheduling coordinators would have to operate on a 24-hour basis, and would submit to the ISO schedules for all parties they represent. Subject to the certification criteria, any customer may be its own scheduling coordinator. Scheduling coordinators also must forward and respond to ISO instructions to revise generation and load schedules to maintain grid reliability; and must implement any settlement process with the loads and generators that it represents and with other scheduling coordinators with which it interacts.

2. Control Area Operations

As the control area operator, the ISO will be responsible for ensuring reliability and safety of the entire ISO grid and balancing loads with generation, consistent with NERC, WSCC, and each Company's specific reliability requirements and operating guidelines. The filing indicates the following related duties: manage the grid during normal operating conditions, coordinate transmission facility outages and returns to service, manage

30/ Id. at 35-36.

31/ Id. at 37-41.

32/ See Appendix C of the ISO filing.

system emergencies, arrange for ancillary services, 33/ and manage over-generation conditions. 34/

### 3. Settlements and Billing

The Companies propose that the ISO will handle settlement with and billing of scheduling coordinators for ancillary services, energy imbalances caused by scheduling deviations, transmission congestion, and administrative costs, including development costs. Schedules submitted to the ISO will be the basis for the settlement process with scheduling coordinators.

### 4. Transmission System Information and Communications

The Companies propose that the ISO will establish and run a transmission system information network (OASIS) which be the central source of communications related to the transmission system, including operating instructions.

### 5. Transmission Access and Pricing

#### (a) Transmission Access Charge

A proposed transmission access charge would be applied to parties that withdraw power from the ISO grid, and would recover the revenue requirement associated with the facilities that the transmission owners transfer to the ISO. 35/ As proposed, the transmission access charge would be a rolled-in rate determined for each service area. To implement this proposal, each transmission owner participating in the ISO would file with the Commission an access charge that would apply to the customers located in its service territory. Thus, the access charge for a particular transaction would be based on the traditional service area in which the customer withdraws power from the ISO grid.

33/ The ISO will obtain ancillary service through an auction in the day ahead market and in the hour ahead market if necessary. Market participants may self provide or acquire ancillary services.

34/ An over-generation condition occurs when the combined output of resources defined by the California Commission as "must-take resources (QFs, nuclear, and preexisting power purchase contracts with minimum take requirements), coupled with reliability must-run and hydro spill generation, exceed the total system load. (See Appendix C of the ISO filing.) The Companies characterize over-generation as a transitional phenomenon because the number of must-take resources will decline over time.

35/ See ISO Application at 75.

This means that customers would pay a single transmission access charge, but it may differ depending on the place where the power is withdrawn. For example, a customer withdrawing power in the traditional PG&E service area would pay a single transmission access charge based only on the revenue requirement of facilities that PG&E transfers to the ISO. The customer would not have to pay additional transmission access charges for the use of the ISO grid. 36/

However, the filing proposes a slightly different methodology for so-called "dependent" transmission owners, that are not "self-sufficient." 37/ Dependent transmission owners would be charged a transmission access fee which would include a portion of the access charge of the transmission owner they depend on. The Companies state that the method for calculating the access charge for dependent transmission owners is still being developed. 38/

Entities wheeling power through or out of the ISO grid would pay the transmission access fee of the transmission owner located where the power leaves the ISO grid. 39/ The Companies suggest that where two or more transmission owners own the facilities at the exit point, the charge could be the weighted average access charge of all transmission owners of the exit point. Parties wheeling power into the ISO grid and selling to either a direct access customer purchasing transmission service, a transmission owner, or a wholesale customer pooling transmission through the ISO, would not pay a transmission access fee. That charge would be paid instead by the power purchaser. All wheeling revenues would be treated as revenue credits to the transmission owners that are paid the access charge.

36/ Id. at 76-79.

37/ A "self-sufficient" transmission owner is one for which the sum of the dependable generation within its service area (regardless of ownership) and the firm import interconnection (including transmission rights) to the transmission owner's service area is greater than or equal to the peak load for the transmission owner's service area plus minimum WSCC operating reserves. See ISO Application, section 5.4.2.1.5, at 81-82.

38/ Id. at 78.

39/ Id. at 79-80.

The Companies state that the proposed pricing structure is designed to recover the utilities' transmission revenue requirement, promote the economically efficient use and expansion of the transmission grid, avoid cost-shifting from one utility to another, and avoid the possibility of stranding transmission revenues between regulatory jurisdictions. The Companies list principles and goals underlying this approach: 40/ (1) providing comparable prices for similarly situated ISO grid customers; (2) minimizing cost and benefits shifts between and among the transmission owners and their customers; (3) allowing the transmission owners an opportunity to recover all portions of their revenue requirements; (4) avoiding pancaked rates; (5) providing seamless access and rates for customers, regardless of whether they choose utility service, physical direct access, or wholesale transmission service; and (6) ensuring that the customers of transmission owners pooling their transmission facilities continue to receive the benefits of transmission investments made on their behalf and continue to bear the related costs.

Each transmission owner would bill and collect the access charge from the retail customers in its respective service area. The ISO would be responsible for collecting the wheeling service access charges from wheeling parties. 41/

The Companies state that they will develop a transmission revenue requirement for the facilities the Commission authorizes for transfer to the ISO's operational control and will request approval for that revenue requirement in the Phase II filing. 42/ Specifically, each transmission owner participating in the ISO would file with the Commission and support its own revenue requirement and access charge for its transmission facilities transferred to the ISO's control. 43/

40/ Id. at 76-77.

41/ Id. at 82-83.

42/ Id. at 81.

43/ This would include O&M, capital and overhead costs, as well as a forecast of the usage of the transmission owner's facilities transferred to the ISO's control for the applicable time period, the billing determinants, rate of return, and supporting material. The Companies request that the Commission work together with the California Commission to develop common cost of service principles for transmission that would be as close as possible to a California Commission cost-of-service calculation for transmission, in order to avoid stranding revenues between  
(continued...)

The Companies propose to establish transmission revenue balancing accounts to track each transmission owner's revenue requirement, "at least for the initial stages of ISO implementation." The Companies state that it is difficult to accurately project the levels of transmission service to be provided, and they anticipate significant differentials between approved and actual revenues. The balancing accounts would, for each transmission owner, match the Commission approved cost of transmission with the actual revenue intended to meet those targets, and would accrue interest. The accumulated over- or under-collections would be amortized over the next succeeding rate period for each transmission owner. 44/

The Companies state that the proposed balancing accounts would eliminate the need to rely on ex-post calculations of revenue allocations to transmission users, protect transmission owners from shortfalls or windfalls, result in comparable cost responsibility between transmission owners and transmission users, and do not shift to transmission owners the risks associated with a new market structure.

(b) Proposed Usage Charges

The Companies propose a congestion management pricing system that utilizes locational, marginal cost pricing. 45/ According to the Companies, congestion costs would arise whenever there is insufficient transmission capacity for the ISO to implement all requested schedules. In order to meet demand, alternative, higher priced generation must be dispatched. Under the proposal, the ISO would charge scheduling coordinators usage charges for transmission scheduled across congested zone interfaces to recover these higher generation costs. Congestion costs that arise within a zone would be collected through a "grid integration charge" from users within that zone on an average basis.

The Companies argue that the proposed usage charge would send appropriate price signals for the siting of generation, by providing a financial incentive to locate new generation on the import side of a congested zone interface. In addition, the

43/ (...continued)

jurisdictions, to ensure that costs not get shifted among transmission owner customer classes, and to ensure that there are no free riders of the transmission system. See ISO Application at 82-83.

44/ Id. at 83-84.

45/ Id. at 89-90.

Companies point out that the use of locational marginal cost pricing will promote efficient expansion of the ISO grid. 46/

The Companies define a zone as a portion of the ISO grid within which congestion is expected to be minimal and to occur infrequently under normal operating conditions. Interfaces between zones are defined by facilities for which demand may often exceed path or network ratings. 47/

The Companies propose four congestion zones based on historical transmission congestion data. 48/ Three of these zones are located in northern California within the PG&E service area (one zone consisting of San Francisco); the fourth zone would consist of the southern portion of the PG&E service area and all of southern California, including the entire SoCal Edison and SDG&E service areas.

The ISO would monitor the congestion costs and would propose additions or deletions of zones. 49/ The ISO would be authorized to propose a new zone only where congestion costs are significant enough to allocate the costs to particular users and where the price differences would send useful price signals. Specifically, the ISO would propose a new zone if the level of congestion across a path within an existing zone exceeds a specified threshold over a twelve-month period. 50/ The new zone would be effective in 90 days.

There are three proposed exceptions to the twelve-month period: First, the ISO would be permitted to change zones after the first six months of operation if the threshold is exceeded by ten percent. Second, if a planned addition of a generator or load would create congestion that could change the zones, the ISO may shorten the one-year period. Third, the ISO may eliminate a zone if a planned transmission project would eliminate congestion between existing zones. The ISO also may change the criteria for

46/ Id.

47/ Id. at 90-91.

48/ See Appendix F of the ISO Application.

49/ See ISO Application at 91-93.

50/ This determination would be based on numerical criteria. Specifically, the cost of congestion on the path in question during normal operating periods must over the course of one year be monetarily equivalent to five percent of the product of the transmission owner's access charge times the capacity of the rated path. Id.



establishing or revising zone boundaries, subject to Commission approval. 51/

The proposed congestion usage charge would be based on the congestion cost between two zones, or "inter-zonal" congestion costs, defined as the difference in marginal or market clearing prices for electric energy in the two zones. 52/ As proposed, the usage charges would be billed to the scheduling coordinators that scheduled transactions over the congested interface. To the extent that the PX, itself a scheduling coordinator, schedules transactions over congested interfaces, it would recover these usage costs as part of the market clearing price paid by PX buyers in the higher priced zone. To the extent that the congestion is caused by wheeling transactions, the usage charge would be billed to the scheduling coordinator for the wheeling party. To the extent such flows are attributable to the Companies' must-take resources, the usage charge would be passed on to the entities purchasing energy from the must-take resources. Thus, usage charges would not be charged to individual generators.

The Companies propose to use congestion revenues to offset the revenue requirement of the transmission system on which the congestion occurred. (If more than one transmission owner owns the congested facilities, the revenues would be allocated on the basis of ownership.) Transmission owners would then allocate a share of these revenues to existing holders of firm contractual transmission rights over those interfaces, if those rights have been placed under the control of the ISO. Moreover, if a transmission owner pays a usage charge for the benefit of existing contract holders, it would be reimbursed by the ISO out of the ISO's total congestion revenue.

Intra-zonal congestion costs would be handled separately from the inter-zonal congestion discussed above. The intra-zonal congestion costs would be determined as follows: Generators not redispatched due to congestion would be paid the market clearing price, adjusted for losses. Scheduling coordinators for generators redispatched upward by the ISO would be paid for the incremental output by the ISO at their bid price. Scheduling coordinators for generators redispatched downward will buy replacement energy at the lower of the redispatch generators decremental bid price or the ISO determined zone price. 53/

51/ Id. at 93.

52/ Id. at 93-96.

53/ Id. at 96-98.

The ISO would then aggregate these costs and would pass them on to scheduling coordinators and their customers through a grid operations charge to be paid in proportion to their customers' loads within that zone.

(c) Transmission Congestion Contracts (TCCs)

The Companies suggest that, if there is a demand for Transmission Congestion Contracts (TCCs), they may be a way to provide grid users the equivalent of a fixed price transmission service contract from the ISO over time. 54/ These could be defined and administered by the ISO and/or developed as a financial instrument separate from the ISO. These would be purely financial instruments, tradable in the secondary marketplace, with no effect on the ISO's physical operation of the transmission system. The proposed OASIS would facilitate TCC trading.

According to the Companies, TCCs would serve to eliminate the uncertainty inherent in the proposed usage charges. The purchaser of a TCC would pay a lump sum and would then be entitled to the congestion revenues to offset usage charges on a congested path at a particular zone interface. However, the Companies do not propose to implement TCCs in this form initially. Instead, they propose that the ISO would rebate congestion revenues back to the owners of the transmission facilities that are congested. The transmission owners would use the rebates as credits to their revenue requirements and thereby reduce their respective access charges. The Companies state that the customers who are responsible for the transmission revenue requirements are deemed to be entitled to congestion revenues. The Companies' proposal does not describe the specific method by which individual customers would receive the benefits of the rebates. 55/

The Companies propose to phase-in TCCs to the extent they may be needed by direct-access customers that are to be phased in over a five-year period. However, the Companies point out that the ISO's sales of TCCs to direct-access customers should be at full market value, so as not to disadvantage the transmission customers that initially hold these rights. 56/

54/ Id. at 102-106.

55/ As discussed later in this order, the filing appears to contain inconsistencies and ambiguities with respect to this issue.

56/ The Companies provide no further details regarding this proposal.

The ISO would offer TCCs for the proposed zone interface if other market mechanisms do not provide them, if there is sufficient demand, and if the ISO receives regulatory approvals for the mechanism to sell TCCs for fair market value. The ISO would offer new TCCs for any new zones it defines. As mentioned above, TCCs would be purchased for a lump sum payment. In turn, the ISO would pay this amount to the transmission owner which would credit the payment against the access fee for the transmission system in which the inter-zonal interface is located. The Companies state that the ISO would sell TCCs to grid users until independent markets develop to meet the demand for such instruments.

TCCs would also be offered for new facilities that become part of the ISO grid. In this case, the TCCs would be allocated to the parties paying the costs of the facilities. In that way, they would benefit from their investment in the new facilities by avoiding future congestion costs and would receive the equivalent of firm rights to the facilities.

(d) Treatment of Transmission Losses

The Companies propose to allocate transmission losses on the ISO grid to scheduling coordinators in proportion to the marginal impacts on the transmission system caused by different generators.<sup>57/</sup> First, the ISO will assess total transmission losses to be allocated among all generators. Then, for each generator, it will determine a location-specific marginal loss factor based on the marginal impact of each generators' output on total system transmission losses. The ISO will then scale these loss factors so that the sum of all loss factors equals the system total losses.

Scheduling coordinators would then schedule sufficient energy to meet the resulting scaled marginal losses for each generator it represents. Scheduling coordinators may either: (1) provide in-kind loss repayment, by scheduling generator output equal to load plus estimated losses using each generator's scaled loss factor; (2) purchase such energy from other scheduling coordinators and schedule the amounts with their output schedules; or (3) schedule output including losses and purchase the losses from the ISO at its real-time balancing price.

The Companies assert that this loss determination methodology would send marginal cost-based signals and would ensure no over-collection of revenues associated with losses. The ISO will also provide loss cluster information within zones to provide additional price signals.

<sup>57/</sup> Id. at 100-102.

## (e) Transmission Expansion

The Companies' proposed transmission expansion rules vest the owner of the transmission system to be expanded, rather than the ISO, with the ultimate obligation to build; and they provide different procedures for transmission expansion driven by economics as opposed to reliability concerns. 58/

The Companies assert that decisions to expand for economic reasons should be driven by the marketplace. The proposed usage charges would send price signals. Parties would be willing to pay to expand the system when congestion costs exceed expansion costs to remove a constraint. The Companies propose to assign the costs of such expansion projects to the parties that benefit.

59/

Where the market cannot produce backing for a beneficial project, 60/ the Companies have proposed a backstop procedure whereby an independent decision-making body would determine the need for an expansion project. 61/ The process would be either through a regional transmission group (RTG), such as WRTA, or the ISO.

The Companies state that reliability-driven projects would remain the responsibility of the transmission owners, who would ensure that such expansions meet grid requirements consistent with applicable reliability criteria. The costs of such projects would be rolled-in to the transmission owner's revenue requirement.

The Companies note that transmission owners would remain subject to section 211 of the FPA, but that the proposed transmission expansion procedures and the ISO's open access requirements would make section 211 proceedings unnecessary. 62/ The Companies state their expectation that the Commission would redirect proponents of section 211 filings to the procedures that will be contained in the ISO tariff.

58/ Id. at 109.

59/ Id. at 110.

60/ For example, some parties may refuse to participate in order to receive for free the benefits of a system expansion. Or, the benefits of a particular expansion project may be widely spread, making it impractical to require joint sponsorship.

61/ See ISO Application at 111.

62/ Id. at 115.

The Companies identify six implementation steps: 63/

Need Determination. Anyone other than the ISO may become a project sponsor advocating a project. The sponsor would either commit to pay in full for a market-driven project or would present it to the backstop decision-making body. Transmission owners would identify the need for reliability-driven projects.

Facilities Determination. Transmission owners would determine the design of facilities to be constructed on their systems, pursuant to applicable criteria and consistent with the WRTA Agreement, unless the facilities are for an interconnection between electric systems, which may be designed and constructed by anyone.

Operational Review. The ISO would review all facilities that are to be connected to the grid for operating flexibility and integration with the grid.

State Approval and RTG Coordination. Public utilities must obtain a certificate of public convenience and necessity from the California Commission. Also, project sponsors must ensure that WRTA members' expansions above 100 kV are coordinated through the RTG's regional planning process.

Obligation to Build. Transmission owners will retain the obligation to build any expansions to their transmission systems meeting these criteria, subject to obtaining necessary approvals and property rights.

Cost Recovery. Recovery of expansion costs would be subject to the Commission's approval. The Companies request that the Commission afford deference to the California Commission's certificate process, as well as the decisions of the ISO and RTG regarding the need for expansion facilities, to ensure that the costs associated with such projects are recoverable in rates.

(f) Transmission Access

Under the Companies' proposal, the ISO would afford open non-discriminatory access to the facilities under its control. 64/ All market participants would receive the same treatment. Where transmission is congested the ISO would follow established procedures to allocate capacity to its highest valued use (while observing must-take requirements and existing transmission service contracts.) These procedures include

63/ Id. at 112-14.

64/ Id. at 66-69.

publishing information regarding locations of system constraints, and application of the usage charges discussed above.

Specifically, the ISO will receive day-ahead schedules for the PX and for other scheduling coordinators. Based on the scheduling information and the bid prices submitted by the PX and the price bids that other scheduling coordinators may choose to submit, the ISO will determine the expected costs to use congested paths. The ISO will then provide advisory information regarding congestion costs and an advisory redispatch, to allow the participants to adjust their schedules. The scheduling coordinators would then submit revised schedules. Where congestion remains, the ISO would then adjust schedules, based on the submitted cost information, to ensure the most efficient grid usage within operating limits. Scheduling coordinators would be able to adjust their schedules again in the hour-ahead scheduling period. The ISO would then evaluate the hour-ahead schedules using the same procedures. However, under emergency conditions, the ISO may take actions it deems necessary to maintain the stability and reliability of the system, regardless of economics, until the emergency is brought under control.

The Companies also may provide jurisdictional service to wholesale customers over facilities that are not within the ISO's control. PG&E and SoCal Edison state they will file open access tariffs with the Commission, to be effective concurrent with the commencement of ISO operations, to address these transactions. SDG&E does not currently serve wholesale customers with facilities that will not be under ISO control. 65/ Furthermore, the Companies state that they will also file with the California Commission an open-access retail local distribution tariff, to ensure service to direct access retail customers.

#### C. Retail Direct Access

To implement the California Commission's retail direct access program, the Companies propose the following conditions: 66/

1. the retail customer must have paid its share of transition costs, even if the customer is served directly from ISO facilities;
2. retail direct access will be phased-in over five years;
3. California publicly-owned electric utilities must afford reciprocal direct access to their retail customers in order

65/ Id. at 69-70.

66/ Id. at 71-73.

- to be allowed direct access to retail customers in the Companies' service areas; and
4. participating utilities and third parties must comply with California's retail direct access eligibility or ISO access will be denied. (Thus, the ISO will enforce the retail access reciprocity provision).

The Companies state that the ISO must enforce the reciprocity provision in order to comply with the California Commission's rules. In addition, the Companies reserve the right to pursue reciprocal direct access opportunities outside of California.

#### Overview of the Proposed PX in Docket No. ER96-1663-000

The Companies state that the PX will establish a competitive spot market for electric power through a day-ahead and hour-ahead auction of generation and demand bids using transparent rules and protocols. This auction will bring together buyers and sellers who have not arranged all of their needs through bilateral contracts. The auction will also allow the PX to reveal day-ahead and hour-ahead market-clearing prices in coordination with the ISO. 67/ According to the Companies, the day-ahead market is needed to accommodate the lead times required for start-up of fossil plants to meet load reliably, and the hour-ahead market provides flexibility to account for changed circumstances. Commitments will be treated as forward sales and purchases. They state that, "[a]t times, the PX will need to iterate with the ISO to ensure that transmission constraints are not violated and over-generation conditions do not exist."

Day-ahead demand bids, and any associated price limits, will be submitted to the PX from buyers on behalf of their end-use customers or by end-use customers themselves. All generators wishing to supply energy may bid, including baseload, intermediate load, cycling units, and intermittent energy producers such as solar and wind units. Generation and demand bids will be binding on the bidders when they are submitted to the PX, although the generation and demand schedules are subject to adjustment by the ISO for reliability and congestion management purposes. The PX will conduct a day-ahead auction of bids from generators to serve the demand bids at or below the bid-in demand price.

67/ The Companies state that, pursuant to the California Decision, the Companies will be paid a market-clearing price for generation, which may or may not be sufficient to cover the costs currently recovered through California Commission ratemaking. They state that any under-recovery should be treated in the CTC mechanism.

The PX will rank and evaluate generation bids in merit order, based on both price and operational capabilities, and will then submit its preferred, balanced day-ahead schedules of generation, load, and associated transmission losses to the ISO. The PX's schedules will include generation, the Companies' loads bid into the PX and which are not served by other means, together with demand bids submitted from other buyers, including but not limited to, municipal utilities, other scheduling coordinators, and utilities outside the ISO's control area. The PX's preferred schedules will also include reserve and regulation ancillary services sufficient to meet the PX's pro rata share of the requirements for the ISO's control area. The PX will bid both to supply ancillary services to, and to buy its full ancillary services requirements from, the ISO. 68/

Prior to the PX's submission of its preferred schedule, the PX will participate in the ISO's management of over-generation conditions. The ISO will also receive balanced schedules from non-PX scheduling coordinators and will perform analyses to determine if transmission congestion will occur as a result of the combined schedules of the PX and other scheduling coordinators, and to arrange for required ancillary services. The scheduling coordinators will have an opportunity to adjust their schedules to account for transmission congestion. Upon final acceptance of all schedules by the ISO, the PX will notify the PX generators and buyers of the accepted generation and load schedules. These accepted schedules will become the day-ahead generation and load schedules and will be the basis on which the PX reveals the day-ahead market-clearing price in each zone and the corresponding price at each generator location in each zone.

68/ Under the proposal, the ancillary services offered by PX generators will be offered to the ISO at market-clearing prices, consistent with the PX's other market-clearing price determinations.

SDG&E originally dissented from the proposal with respect to price determination by the PX. SDG&E would have the PX publish locational market clearing prices as obtained from, and determined by, the ISO in the day-ahead and real-time balancing markets. Those prices would be used to establish compensation and billing for PX traders included in the final day-ahead and hour-ahead schedules, and for deviations between each PX trader's scheduled and metered quantities. See Companies' Application at 14 and Appendix D. However, SDG&E subsequently filed a motion to withdraw its dissenting pricing proposal.



The Companies state that a similar process, not including an iteration, will be used for hour-ahead scheduling. These final day-ahead and hour ahead schedules are used in the PX's settlement process, and are financially binding.

Participation in the PX will be voluntary, except that for a five-year transition period, the Companies must bid all of their generation into the PX and must purchase through the PX all of the electric energy required to serve their utility service retail customers. After the transition period, the Companies' participation in the PX will be voluntary.

Pursuant to section 205(c) of the FPA, 16 U.S.C. 824d(c) (1994), the Companies will file with the Commission the rate schedules and related contracts, rules, and protocols by which they will make wholesale sales through the services provided by the PX. 69/ The Companies further state that filings also will be made for all agreements governing or related to sales made through the PX, such as the "PX-Seller Agreement" and the "PX-Buyer Agreement" that each of the Companies will enter into with the PX. Once filed, these rate schedules and related contracts, rules and protocols will be subject to the exclusive jurisdiction of the Commission under sections 205 and 206 of the FPA, 16 U.S.C. 824d, 824e (1994).

Once the PX is in operation, the filing parties will authorize the PX to file on their behalf under section 205 any new rate schedules and amended contracts, rules, and protocols that change the rights, duties or operations of the PX. The PX will have exclusive filing authority, since the governing contracts will prohibit any party from making unilateral filings unless that party has exhausted its remedies under the PX's dispute resolution process.

The PX as an entity itself will be a public utility under section 201(e) of the FPA, 16 U.S.C. 824(e) (1994). The PX will bill and collect revenue from energy purchasers at uniform marginal energy prices (averaged over a transmission zone) and disburse this revenue to the energy sellers and the ISO. All generators in a zone will be paid the bid price of the last winning marginal generator. The ISO will be paid for transmission losses, ancillary services, and congestion costs. Moreover, subject to the ISO's grid-management protocols, the PX

69/ Section 205(c) provides that "every public utility" file with the Commission "schedules showing all rates and charges for any transmission or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with all contracts which in any manner relate to such rates, charges, classifications, and services."

auction will determine which buyers and sellers will sell or purchase through the PX, as well as the price and other terms under which these transactions will be made. In this sense, the PX will effectively exercise control, including unit-commitment and scheduling control, over transactions made through the PX.

The Companies state that the PX will be independent from the ISO and other market participants. In accord with the California Commission Decision, the PX will have no financial interest in any source of generation, load or any other market participant, and will have no financial interest in or relation to the ISO. Further, the Companies state that the PX will not own or operate any generation, transmission, or distribution facilities or be affiliated with any companies that own or operate such facilities or buy or sell through the PX.

#### Governance of the PX

The Companies state that the PX is to provide for wide participation and flexibility in PX governance. Decisionmaking concerning the PX is allocated among this Commission, the PX Governing Board, and the PX's CEO, depending on the nature and urgency of the matter. The Commission must authorize matters such as changes in tariffs (e.g., changes to costs of service, curtailment protocols), structural changes to the PX (e.g., changes in the composition of the Governing Board, termination of the PX), changes to standard contract provisions (e.g., requirements for specific information from market participants), and establishing standards for market participation.

The Companies state that the Governing Board will be the equivalent of a corporate board of directors. It will be the chief policy and decisionmaking body of the PX. Its functions will include approving, for filing with the Commission, revisions to the PX tariffs, rules and protocols. It will have oversight responsibility for the operations of the PX, but will not participate in the day-to-day operations or real-time decisions of the PX. It will, however, review and establish policies to assure the independent operation of the PX.

With respect to the composition of the Governing Board and voting rights, the PX bylaws will establish five "classes" that will select directors, including four "market participant" classes -- "non-utility generators, end-users, buyers/sellers, and distribution companies -- and a "non-stakeholder/public" class. 70/ The Companies state that this structure will assure broad and balanced representation of market interests.

70/ The Companies state that the non-stakeholder/public director positions will be filled by appointed professionals with relevant experience.

The Companies state that the classes are relevant only for selecting directors for the Governing Board. Once selected, directors will serve as equal members on the board and will vote individually, not as a class.

The bylaws are also intended to prevent an entity from participating in director selection in more than one class. For example, an entity (including all affiliates and subsidiaries) may participate in only one class. 71/

The Companies state that the number of classes defined and the number of directors selected by each class reflect two overriding principles: (1) no one class should be able to block or veto action; (2) no two classes should together be able to form a sufficient majority to make decisions. The five classes will select 17 directors who will serve three-year terms. Those 17 director positions will be allocated among the classes as follows:

- Non-Utility Generators - 3 seats;
- End-users - 4 seats;
- Non-Stakeholder/Public - 2 seats;
- Buyers/Sellers - 3 seats; and
- Distribution Companies - 5 seats. 72/

The Companies state that 12 votes will be needed to adopt most measures, and 6 votes will be needed to veto most measures.

In anticipation of the market evolving in unanticipated ways, the PX's bylaws will require the Governing Board to submit to the Commission every five years recommendations on whether the class structure for selecting directors should be modified to

71/ Thus, although an investor-owned utility's functions could include that of a distribution company and buyer/seller, rather than allowing these entities to be represented in each class category (and possibly dominating selection of several directors), the utility (and its affiliates and subsidiaries) may join only the Distribution Companies class. In that case, the generation affiliate of a utility in the Distribution Companies class may not independently participate in the selection of the Buyers/Sellers class director. However, if a utility in the Distribution Companies class were to divest some or all of its generation plants, the new independent owner(s) could participate in the Buyers/Sellers class.

72/ Three directors will be selected if only the Companies are in this class, four directors if four entities are in this class, and five directors if five or more entities are in this class. PX Application at 34, note 25.

better reflect the interests of the market. The first such filing will be made after three years.

The class of non-utility generators is composed of non-utility owners of generation that sell power through the PX (e.g., independent power producers (IPPs), qualifying facilities (QFs) and exempt wholesale generators (EWGs)). This class will select directors using voting weighted by quantity of power sold through the PX in the previous year. The PX bylaws will specify how the initial directors will be selected.

For the end-user class, one director from each end-user customer group (i.e., agricultural, industrial, commercial, and residential as such customer groups are defined in California Commission-approved tariffs) will be selected to fill each of the director positions.

The directors from the non-stakeholder/public class will have no commercial interest in the outcome of PX transactions, but will have technical or professional experience in the electricity field. One committee will nominate candidates, and another committee will appoint directors from the list of candidates.

The buyers/sellers class is composed of Commission-approved power marketers, governmental agencies which buy/sell energy through the PX but are not in the distribution companies class, and any buying/selling entity not located in the ISO control area (e.g., out-of-area utilities). The buyers/sellers class will determine the manner of selecting its directors.

The distribution companies class is composed of distribution utilities (investor-owned utilities or municipal/governmental) that are buyers of generation supply through the PX for the purpose of serving their customers within the ISO control area. The voting will be weighted based on kWh of energy purchased through the PX during the previous year. A distribution company may vote for only one director candidate. Thus, the Companies may select no more than three directors. The PX bylaws will specify how the initial directors will be selected.

Two-thirds of the Governing Board will constitute a quorum, and most actions will require a two-thirds vote of the quorum present. The Companies state that very significant actions such as removal of directors or dissolution will require an 80 percent majority vote.

The PX bylaws will establish conflict-of-interest standards for Governing Board members, staff and consultants. Staff and consultants will be required to be independent of the interests in and the outcome of the competitive electricity market.

A variety of agreements and tariffs (ISO/PX Implementing Agreements) will include the rules, protocols or procedures which the PX will adopt to develop the preferred generation dispatch schedule in the forward market; and agreements between the PX and market participants dealing with entity-specific aspects of market participation. The Companies state that agreements between the PX and market participants will be standardized to the extent possible.

#### Bidding Rules and Bid Evaluation Procedures

The PX will evaluate generation and demand bids and establish a day-ahead preferred schedule by taking into account both the prices offered for service from each bid-in generating unit and the operating capabilities of each unit together with the demand bids for quantity of load and price. The PX will consider operating constraints, and it will not include in its final schedule any demand which had an associated bid price below the market-clearing price.

Based on the final PX dispatch schedule accepted by the ISO, the PX will reveal its market-clearing prices for PX energy. A uniform market-clearing price for PX buyers in a congestion-management zone 73/ will be established based on the cost of the marginal generator in that zone for each hour. Hourly prices will be established based on the PX's 24-hour optimization. 74/ However, the Companies state that notwithstanding the existence of different market-clearing prices in specific congestion management zones, the California Commission Decision envisions that the Companies will average the costs paid for energy within or among the utility service customers the Companies serve. 75/

The PX price-determination methodology will establish a price in each hour that will match supply and demand according to five principles: (1) the loss-adjusted market-clearing price paid to the marginal generator in each hour will be no less than the combined energy and no-load bid price of the marginal generator; (2) the loss-adjusted market-clearing price may include all or a portion of the start-up cost of the marginal unit such that each generator scheduled to operate during the day will be paid no less than its full bid price for its scheduled

73/ The ISO region initially has been divided into four congestion-management zones between which significant congestion is expected to occur.

74/ As noted, SDG&E initially submitted, and then withdrew, a dissenting price determination proposal.

75/ See PX Application at 48, n. 28.

operation; (3) no demand bidder whose demand is included in the schedule will pay more than its bid in each hour; (4) if supply is sufficient to meet demand at or below the demand price bid, 76/ the market-clearing price will be set by the marginal generating unit; and (5) if demand at a price exceeds supply, the market-clearing price will be set by the lowest winning demand price bid. In the absence of adequate demand price bids, demand will be curtailed to match supply, and the market-clearing price will be set equal to an administratively pre-determined cap.

The Companies state that the PX is designed to facilitate trading with adjacent interfacing utilities besides the Companies. Parties that have access to any ISO transmission grid interface will be able to transact business through the PX. Any interfacing utility (or generators/sellers with access to an interface) can sell into the PX and will be treated comparably to other market participants operating in the PX area. Also, utilities outside the PX area interested in buying through the PX will be treated comparably to other PX buyers.

#### Dispute Resolution Process

Parties will be required to commit to an ADR process to settle disputes between or among the PX and market participants. Any party that has completed the ADR process may still appeal to the Commission on the grounds that the arbitration award either is: (1) unjust, unreasonable, unduly discriminatory or preferential or otherwise inconsistent with the FPA or Commission policy; or (2) contrary to or beyond the scope of the specific enabling agreement or specific implementing contract. The agreed-to ADR process provides for Commission deference to the factual findings of the arbitrator.

#### III. Notice of Filing and Interventions

Notice of the Companies' filing was published in the Federal Register, 77/ with protests and motions to intervene due on or before June 13, 1996. Timely motions to intervene related to the ISO filing in Docket No. EC96-19-00 were filed by the parties listed in Appendix A. Parties filing late motions to intervene in Docket No. EC96-19-000 are listed in Appendix B. Timely motions to intervene and a notice of intervention related to the PX filing in Docket No. ER96-1663-000 were filed by the parties

76/ As defined by the Companies, a demand price bid states the maximum price for each hour at a which a customer is prepared to take a specified amount of energy in the day ahead schedule. See PX Application at 44.

77/ 61 Fed. Reg. 25,216 (1996).

listed in Appendix C. Parties filing late motions to intervene in Docket No. ER96-1663-000 are listed in Appendix D.

The Companies filed an answer to the Comments on June 28, 1996, as described in the discussion below. On July 11, 1996, TANC filed a motion to strike or disregard the Companies' answer to TANC's protest as an improper answer to a protest. TANC contends that it carefully delineated its motion to intervene from its protest. They argue that the Companies are merely attempting to get a "second bite at the apple."

The Companies respond that their answer clarifies many issues, corrects numerous misconceptions regarding their proposal, and will therefore materially assist the Commission in resolving the issues presented in this proceeding. They also argue that TANC should not be permitted to fashion its pleading as a protest in order to prevent the Companies from answering TANC's substantive arguments.

On August 15, 1996, the California Commission filed Supplemental Comments addressing numerous aspects of the ISO and PX applications, as discussed below. 78/ Further comments were filed on September 23, 1996, in connection with the Commission Staff's September 12-13 technical conference and in response to the California Commission's August 15 Supplemental Comments.

As noted above, on September 20, 1996, the Commission issued a notice directing the Companies to file any amendments to its Phase I applications that are required as a result of the passage of the Restructuring Legislation by the California Legislature within fourteen days after the Governor of California signed the legislation. 79/ On October 7, 1996, the Companies filed a Joint Statement of Applicants and Indicated Intervenors on Implementation of California Legislation (Joint Statement). 80/ On October 17, 1996, the California Commission filed comments regarding the Companies' Market Power filings. Finally, on October 21, comments addressing the

78/ The California Commission's comments regarding the Companies' Petition for a Declaratory Order were addressed in the Commission's order in Docket No. EL96-48-000. See supra note 3.

79/ See supra note 2.

80/ Joining with the Companies were the Los Angeles Department of Water and Power and the Imperial Irrigation District. We will refer to the parties submitting the Joint Statement as the Joint Parties.

California Commission's August 15 Supplemental Comments and the Joint Statement were filed. These are discussed below. 81/

#### IV. Discussion

The Companies' proposal is the product of a lengthy, ongoing process involving the Companies, the California Commission, the California legislature, and widespread stakeholder participation. These efforts have resulted in a set of proposals that provide an acceptable framework for the Commission to grant preliminary approval of the ISO and PX, subject to the conditions, modifications, and further information required herein.

We are very much aware that the proposals before us represent a work in progress, with many of the details yet to be determined, and that these proposals break new ground in terms of industry restructuring. Accordingly, we must carefully evaluate the basic elements of the framework to determine whether it is an acceptable basis for going forward. We emphasize that the judgments we render and the guidance we provide herein are necessarily interim in nature.

We have to date received an extensive array of comments and suggestions from the parties related to the proposals before us. These comments reflect a tremendous effort on the part of all of the interested parties to shape an appropriate restructured market in California, and have helped shape our guidance and assist our understanding of the filings. To the extent we do not address comments and concerns in this order, we will address them at the appropriate future times, as our review of the proposals continues.

Furthermore, we expect that many issues will be raised by the parties as to the terms of the jurisdictional tariffs, agreements, and bylaws to implement the proposal. As this process continues and such documents are placed before this Commission for our review, the Parties will be given a full opportunity to air their views. Thus, nothing herein concludes that the Companies' proposal is satisfactory under the FPA. We will withhold judgment until the specific documents detailing the complete proposal are before us.

We do not believe that it is appropriate to set these matters for a trial-type hearing at this time, as requested by some intervenors. As mentioned above, we are in this order providing preliminary guidance with respect to policy issues raised by the filings, and are not determining factual issues. Nor do we consider it appropriate to dismiss the filings,

81/ Only comments which relate to the ISO and PX filings are discussed herein.



notwithstanding the lack of details. It is evident that the filings have raised a large number of policy issues. Rather than dismissing the applications, we find that the conceptual framework of the proposal is acceptable and offer what guidance we can in order to facilitate the orderly restructuring of the California market.

A. Procedural Matters

Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. 385.214 (1996), the notice of intervention and timely, unopposed motions to intervene serve to make the intervenors listed on Appendices A and C parties to this proceeding.

Given the early stage of the proceeding, and the absence of undue delay or prejudice, we find good cause to grant the untimely, unopposed motions to intervene, as listed on Appendices B and D.

We will deny the motion to strike the portion of the Companies' answer that responds to TANC. While our regulations generally prohibit answers to protests, we have adopted in this proceeding procedures to afford parties ample opportunity to express their positions and respond to other parties' positions in their pleadings. We believe that permitting the Companies' answer is consistent with that approach. Moreover, the Companies' answer has assisted us in understanding the issues raised.

As noted above, in conjunction with this filing, SDG&E filed an alternative proposal regarding certain elements of the ISO and PX proposals. On June 28, 1996, SDG&E filed a Motion for Leave to File an Explanatory Statement together with its Explanatory Statement and Appendices. TANC filed an answer urging the Commission to grant the motions to ensure that the record is complete. On July 31, 1996, SDG&E filed a Notice of Withdrawal of Certain Pleadings, as clarified in a letter filed on August 6, 1996. The withdrawn pleadings include:

- a) Appendix G of the ISO Application (setting forth SDG&E's alternative proposals with respect to the ISO);
- b) Appendix D of the PX Application (setting forth SDG&E's alternative proposals with respect to the PX); and
- c) Motion for Leave to File Explanatory Statement, Explanatory Statement, and Appendices to Explanatory Statement filed by SDG&E on June 28, 1996.

SDG&E states it has continued its efforts to narrow the differences among the Companies that remain in the proposals before the Commission. SDG&E asserts that it filed this Notice of Withdrawal to expedite the implementation of the new market

structure in California and to enable a January 1, 1998 start date for the new market structure. While SDG&E indicated its intention to continue to discuss the issues raised in its alternative proposals and other issues as part of developing the Phase II filings, it states that withdrawal of these documents will allow the Commission to rule on a common, jointly-filed, Phase I proposal and will facilitate efforts to reach agreement of the Phase II filings.

NCPA, the Cities of Anaheim, Azusa, Banning, Colton and Riverside, and TANC oppose the Notice of Withdrawal. While these parties do not dispute SDG&E's right to change its position, they claim that the pleadings SDG&E seeks to withdraw provide critical information to ensure a complete record in these proceedings regarding alternative approaches to those advanced by the Companies in their primary proposal. These parties request that the Commission grant the withdrawal conditionally pursuant to Rule 216(c) (18 C.F.R. 385.216(c) (1996)) in order to retain the material in the record. This, they assert, would allow participants to rely on the information in these documents in any further pleadings.

In view of the ongoing development of issues in these proceedings, we believe that the record should be as complete as possible. Moreover, as SDG&E has noted, many issues raised in its alternative proposals will not be resolved in this order, but will be the subject of continuing debate in the development of the Companies' Phase II filings. Accordingly, we will conditionally allow SDG&E to withdraw its position, but will allow the material to remain in the record pursuant to Rule 216(c), as the above described parties recommend.

We will deny the motions to consolidate these dockets. We have previously denied motions to consolidate Docket No. EL96-48-000 with Docket Nos. EC96-19-000 and ER96-1663-000. 82/ As discussed therein, while the ISO application, the PX filing and the Declaratory Order Petition dockets are related, we are not by this order setting these proceedings for hearing. Consequently, no purpose would be served by consolidating the proceedings at this time. Moreover, in Docket No. EL96-48-000, we noted that there are no further proceedings in that docket to be consolidated with the other two dockets.

82/ See Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company, 77 FERC 61,077 (1996).

B. The Establishment of the ISO and PX as Separate Entities

CMA and the ISO Users Group contend that separation of the ISO and PX is an essential element of the proposal. CMA argues that separation is essential to development of a viable competitive generation market and was endorsed by the California Commission. ISO Users Group states that the separation of the ISO and PX gives meaning to service comparability. Simultaneous implementation of direct access and the statewide power pool as agreed to is also critical to ISO Users Group. CMA and the ISO Users Group oppose SDG&E's dissenting proposal because it deviates from strict separation and would, in their view, subordinate bilateral transactions.

The California Commission recommends that the Commission allow scheduling coordinators to voluntarily include in their schedules information on generation that could serve as an additional resource for the ISO to clear congestion on the ISO grid. Specifically, the California Commission recommends that scheduling coordinators be allowed to provide schedules in a format including voluntary decremental and incremental price-bids for both their preferred generators that would be scheduled in unconstrained conditions, as well as alternate generators, which might provide lower cost solutions during congestion periods. According to the California Commission, this will be a workable and efficient method for the ISO to manage congestion and is superior to the "artificially constrained protocols" proposed by the Companies.

In response to the California Commission's comments, the Companies state their agreement. They claim that their proposal would allow the ISO to accept voluntary incremental and decremental price bids for all generators to relieve congestion, regardless of the preferred output of those resources submitted to the ISO from scheduling coordinators.

On November 5, 1996, the Department of Energy (DOE) submitted a study. Among other things, the study criticizes the separation of the ISO and PX, and endorses a mechanism whereby the ISO may accept information regarding all bids.

Commission Response

We accept the proposal to create a PX and ISO as separate entities. We understand that some parties believe that consolidating the ISO and PX into a single organization may produce operational efficiencies. However, as pointed out by CMA and the ISO Users Group, the separation of entities was a crucial element of the agreement reached by the California Commission and the stakeholders in determining how best to restructure the California electricity market. Furthermore, the Companies and

the California Commission have stated that the separation can be maintained without unduly compromising efficiency. Because there is nothing in the present record that indicates that the formation of two organizations is unreasonable, we will not disturb that agreement.

In addition, the California Commission raises a separate issue, the exchange of information between the ISO and the PX. We do not believe that the Companies' proposal requires modification to allow the ISO to accept additional information, as suggested by the California Commission. In response to the California Commission's recommendation that the PX be permitted to submit information to the ISO about bids from alternative generators, along with its preferred generators' schedules and bids, so that the ISO can utilize these otherwise "nonwinning" generators to efficiently relieve transmission congestion, the Companies have clarified that, under their proposal, the ISO can accept voluntary information from all generators and loads in order to relieve transmission congestion and provide ancillary services.

We accept the Companies' clarification. In addition, we will require that the ISO be allowed to use all information it receives in order to develop a least cost schedule (for energy and ancillary service) in performance of its responsibilities to efficiently manage congestion and satisfy its control area responsibilities. Furthermore, the ISO's scheduling protocols should clarify that all scheduling coordinators will be permitted to provide information directly to the ISO.

As clarified in these comments, there does not appear to be any restriction on the voluntary submission of information. However, if the ISO does propose any such restrictions, they must be fully justified in the Phase II filing.

#### C. The Proposed Governance Structure of the ISO and PX Structure and Governance of the ISO

The California Commission comments that the ISO will be a control area operator, so it will be subject to the requirements established in Order No. 888. 83/ The California Commission believes that the ISO's independence is critical. For the most part, the California Commission believes that the proposal for governance meets the California Commission's and this

83/ See Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities and Transmitting Utilities, Order No. 888, 61 Fed. Reg. 21,540 (May 10, 1996), FERC Stats. & Regs. 31,036 (1996), reh'g pending. (Order No. 888).

Commission's criteria, but some changes are critical to ensure independence. The California Commission is concerned about dominance by transmission owners, both publicly and privately owned. The California Commission notes that the ISO must have the effective ability to recommend changes in operating protocols to the Commission in response to changed market conditions.

The California Commission recommends that the Commission require the composition of the Board to be reviewed one year after ISO operation commences, rather than three years, with annual review by the Commission thereafter, to ensure proper board balance. Also, the California Commission recommends that the ISO be able to apply to the Commission to change certain operating protocols, such as creation of new congestion zones, revision of overgeneration protocols, recommendation of upgrades to the Commission, WRTA and the California Commission, standardization of maintenance rating and operating standards, and offering of new transparent unbundled services, on the basis of a simple majority vote, rather than a two-thirds majority. The California Commission argues that this change would ensure flexibility in responding to market conditions. However, the California Commission believes that most issues, such as bylaws changes, should continue to be subject to the two-thirds vote requirement. With respect to the PX Governing Board, the California Commission recommended that the Commission limit generators to eight seats and that buyers and sellers be placed in separate classes, to mitigate potential market power.

For the most part, other commenters support the proposed governance structure. 84/ However, some intervenors, such as CEERT, claim that the governance structure may favor the Companies or that it has not been demonstrated to comply with the Commission's first ISO Principle. 85/ Other commenters request a more refined class breakdown so that they will not be in the same class with market participants that are different from themselves. 86/ There were also comments requesting more votes, and participation in more than one class.

Metropolitan claims that it is excluded from the definition of the Government/Municipal Class due to the wording of the definition. Several joint powers agencies claim that they are

84/ See, e.g., Protests of ISO Users Group, NIEP, CMA/CLECA, and IEP.

85/ Principle No. 1 states, "The ISO's rules of governance. . . should prevent control, and appearance of control, of decision-making by any class of participants."

86/ See Protest of DWR, et al.

excluded from the Government/Municipal class since they do not serve retail loads.

CAC and EPUC support more frequent Commission review of the governance structure. These commenters propose that the Commission review the Governing Board structure every two years. EPUC also states that the Commission should review the overall workings of the ISO in addition to its structure and suggests that a monitoring program similar to that for the PX be established for the ISO. CAC and EPUC recommend that the Commission consider the need for an ISO technical advisory committee to help the ISO transition from operation of the Companies' independent transmission grids to an integrated ISO-controlled grid. The advisory committee could be phased-out after five years.

Some intervenors, such as CEERT, recommend that the ISO board be constituted and that the ISO complete the filings while the ISO is still under the Commission's scrutiny. CalEnergy contends that decisions regarding staffing, structure, rules and regulations should be determined by the independent ISO Board, not the Companies. According to CalEnergy, the proposal to guarantee seats to the IOUs and the super-majority voting requirements and the fact that the Companies will determine the details of the structure, rules and procedures prior to the time the Board takes over give the Companies too much control. Moreover, CalEnergy recommends that the Commission reserve jurisdiction over the ISO as a condition to approval. 87/

Some Commenters also oppose the mandatory ADR requirement contained in the filing, as "abrogating" their rights granted under section 211 of the Federal Power Act. 88/

The Companies dispute claims of dominance in favor of the Companies, noting that the bylaws are to be structured to preclude dominance by any one group. Moreover, the investor owned utilities would only be allowed to participate in one class. They would be represented by three or four members out fifteen or eighteen ISO Governing Board members, respectively. In response to requests for more class distinctions, the Companies assert that it in order to have a Governing Board that is not unworkably large, it is unavoidable that entities grouped within a class will have some differences. The Companies assert that allowing some participants more votes or participation in more than one class is unfair. The Companies assert that they have complied with the Commission's requirement to afford fair

87/ See also, Protest of CMUA.

88/ See, e.g., Protests of DWR, CMUA, Southern Cities, Metropolitan, and Modesto.

and broad participation for all user groups, consistent with Order No. 888. 89/

The Companies state in response to Metropolitan's claim that it is unfairly excluded that Metropolitan misunderstands the provision and clarifies that Metropolitan would be a member of the Government/Municipal class. However, the Companies have a different response to the joint powers agencies. According to the Companies, since the entities that make up these joint powers agencies are government entities that are members of the class in their own right, affording the joint powers agencies participation rights would dilute the class and give the joint powers entities "extra voting power."

The Companies respond to requests for more frequent review of the ISO structure, that review every two years is not enough time in which to evaluate the structure.

The Companies disagree with complaints that the ADR procedures may abridge their section 211 rights, stating that any party may still appeal to the Commission. The Companies also assert that their proposal cannot as a matter of law displace or supersede section 211. However, the Companies believe that the transmission expansion proposal may make section 211 requests unnecessary. The Companies request that the Commission consider the alternatives available to the parties under the proposed ISO structure when considering section 211 requests for relief.

The California Restructuring Legislation imposes an additional layer to the proposed governance structure. Specifically, it establishes an Oversight Board consisting of five members to oversee the ISO and PX Governing Boards. The five members would consist of three California electricity ratepayers who would be appointed by the Governor, and confirmed by the California Senate, plus a non-voting member of the Senate and one non-voting member of the Assembly. The Oversight Board members would serve staggered three-year terms, and may be reappointed. The Oversight Board would have two primary functions. First, it would appoint the ISO and PX Governing Board members, which would be limited to California residents. Second, it would serve as an appellate body for review of ISO and PX Governing Board decisions.

In the Joint Statement, the Companies indicate that the Restructuring Legislation directly affects the governance and organization of the ISO and PX proposed in these proceedings. The Restructuring Legislation requires that all members of the ISO and PX Governing Boards be California residents. The Restructuring Legislation requires that the ISO Governing Board

include representatives of eleven classes: 1) IOU transmission owners; 2) publicly owned utility transmission owners; 3) nonutility electricity sellers; 4) public buyers and sellers; 5) private buyers and sellers; 6) industrial end-users; 7) commercial end-users; 8) residential end-users; 9) agricultural end-users; 10) public interest groups; and 11) non-market participants. The Joint Parties state that these classes are similar, but not identical to, those contained in the Companies' original filings. While the Restructuring Legislation does not prescribe the number of representatives from each class or the voting structure, it does require that a simple majority of ISO Governing Board members be unaffiliated with generation, transmission, and distribution corporations.

The Joint Statement also points out that the Restructuring Legislation requires that the PX Governing Board include representatives of ten classes: 1) IOU distribution companies; 2) publicly owned distribution companies; 3) nonutility generators; 4) public buyers and sellers; 5) industrial end-users; 6) commercial end-users; 7) residential end-users; 8) agricultural end-users; 9) public interest groups; and 10) non-market participants. The Joint Parties indicate that the class structure is similar, but not identical, to that proposed by the Companies. The Joint Parties further state that the final Governing Board structure for both the ISO and PX will be included in the Phase II filings. Unlike the ISO Governing Board, there is no requirement that a majority of the PX Governing Board members be unaffiliated with generation, transmission and distribution corporations.

However, the Companies assert that this legislation left much of their proposed framework unchanged, and that many of the details on governance, including the bylaws protocols, rules and tariffs, prescribed in the legislation will be included in their Phase II filings.

For example, the proposed separation of the ISO and PX and the inclusion of market representatives on the Governing Boards for the ISO and PX were not changed by the Restructuring Legislation. According to the Joint Statement, both the Companies' applications and the Restructuring Legislation contemplate that the ISO and PX would be public benefit, non-profit corporations subject to the Commission's jurisdiction, and that the creation of the ISO, as well as its rate schedules, tariffs, and agreements all would be subject to Commission approval.

The Joint Statement acknowledges that the two-tiered governance structure prescribed in the Restructuring Legislation alters its proposal. The Restructuring Legislation establishes an Oversight Board which would create the ISO and PX, appoint their Governing Board members and establish terms of services,



determine nominating procedures and qualifications for the two Governing Boards, serve as an appellate body to review majority decisions of the ISO Governing Board, and oversee the ISO and PX. The Companies do not see this appellate function as incompatible with their proposed governance structure. They state that their proposed ISO Governing Board's ADR process would fit in with the Restructuring Legislation, and that their proposal is more detailed. 90/

The Joint Statement also discusses some differences in ISO and PX Governing Board composition between the Companies' filed proposals and that required by the Restructuring Legislation, and notes the Restructuring Legislation requirement that Governing Board members, like Oversight Board members, must be California residents. The Joint Parties state their intention that the final ISO and PX Governing Board structures, as developed by the Oversight Board, will be included in the Phase II filings. In this regard, the Joint Statement indicates the Joint Parties understanding that the Oversight Board may not be created until after January 1, 1997, thereby making it impossible to create the ISO and PX Governing Boards during 1996.

The Restructuring Legislation endorses the California Commission's in-state direct access requirement. Under this rule, reflected in the Companies' proposal, local publicly owned utilities in California may not have direct access to the Companies' customers unless such publicly owned utilities provide the Companies reciprocal direct access to their retail customers. In the Joint Statement, the Joint Parties indicate that enforcement disputes could be resolved in the courts. However, the Joint Parties state that it would be desirable to retain an administrative enforcement mechanism through California regulatory bodies. Therefore, they no longer seek to have the ISO enforce in-state direct access reciprocity.

The California Commission comments that nothing contained in the Restructuring Legislation conflicts with its proposed modifications to the ISO and PX governance structures. Like the Joint Parties, the California Commission acknowledges that the Restructuring Legislation requires changes to the Governing Board structure, but believes these changes may be incorporated into the Phase II filing. The California Commission does not believe that the Oversight Board interferes with the Commission's jurisdiction over the ISO and PX.

90/ The Joint Statement also states that the proposed ADR process includes rights to appeal to the Commission under certain circumstances, but neglects to explain how that will be integrated with the Oversight Board's appellate role.

However, the California Commission is concerned about the timing involved under the Restructuring Legislation's requirements for immediate ISO involvement and for the ISO to develop reliability standards by March 31, 1997. Therefore, the California Commission requests the Commission, as part of its Phase I decision, to establish an interim entity by providing detailed guidance as to governance, structure, and responsibilities of the ISO Governing Board. Furthermore, in view of the Restructuring Legislation requirement that the Oversight Board determine the composition and structure of the ISO and PX Governing Boards for the Commission's approval, the California Commission requests that the Commission review the composition and structure of the ISO and PX Governing Boards when filed with the Commission, and annually thereafter.

CalEnergy comments that the Restructuring Legislation effectively supersedes the Companies' proposal. 91/ CalEnergy contends that one element of the Restructuring Legislation governance provisions, the requirement that members of the three boards be California residents, conflicts with Commission policy requiring broad representation on the Governing Boards. CalEnergy argues that most existing and potential market participants are headquartered out of state, and should be able to have non-California officers on the Boards, if that is who may best present their views.

CalEnergy interprets the Restructuring Legislation as requiring a simple majority vote for all ISO Governing Board decisions, based on the provision allowing appeal to the Oversight Board of "majority decisions." 92/ CalEnergy also notes that the ISO and PX will still be subject to Commission jurisdiction, so all of their standards, rules, protocols and procedures must be contained in tariffs subject to Commission approval.

CMUA comments that the Joint Statement acknowledges the requirement for immediate ISO participation in these proceedings, but notes that the Joint Statement fails to include any commitment to fulfill this or other mandates in a timely fashion. CMUA is concerned that the Companies have not afforded sufficient consideration to the independent voice of the ISO, as contemplated by the Restructuring Legislation. 93/

91/ Other commenters, such as NCPA, support this view.

92/ See Restructuring Legislation 339.

93/ See also, October 21, 1996 comments of SMUD and Metropolitan.

Similarly, CalEnergy states that the ISO and PX, rather than the Companies, will need to make filings to implement the California restructuring, yet the Oversight Board that will appoint these bodies cannot be constituted until after January 1, 1997. CalEnergy suggests that the Oversight Board be selected now, and begin operations immediately, even if their appointments are not officially effective until January 1. CalEnergy recommends that the Commission wait for the ISO and PX proposals rather than deliberating on the Companies' proposals, which ultimately may be rejected by the ISO and PX Governing Boards.

Several intervenors comment that the Companies have failed to clarify how they will comply with the Restructuring Legislation's governance provisions. 94/ Turlock continues to believe that the Commission has before it insufficient information and detail to approve anything. 95/ Turlock is concerned that the effective date for Oversight Board appointments under the Restructuring Legislation may cause further delays in the timetable for the Phase II filings.

Western opposes the Restructuring Legislation restriction of board members to California residents. It also is concerned about the role of the state-run Oversight Board regarding its jointly owned facilities, which are not subject to state regulation or jurisdiction.

NCPA reiterates its view that the California Commission's proposal to require conflict of interest standards for PX employees does not go far enough.

TANC comments that the Restructuring Legislation changes the Companies' proposal by allowing joint power agencies, such as TANC to serve on the ISO Governing Board. Although TANC notes that the Joint Statement ignores this change in its extended discussion, TANC expects the Oversight Board or the Companies to address this issue in Phase II.

94/ See, e.g., October 21 comments of San Francisco, DWR, Metropolitan, Cities of Anaheim, Colton and Riverside, Western, and State Water Contractors.

95/ See also, October 21, 1996 comments of Azusa and Banning. Similarly, San Francisco recommends that the Commission limit any approvals in Phase I to the ". . . minimal structure that is fully supported by the application and for which sufficient details have been provided. . . ." and that it provide guidance as to its expectations for the Phase II filings.

CMUA supports the Companies' withdrawal of their proposal to have the ISO enforce the state's retail direct access reciprocity provisions. However, TANC and Metropolitan contend that the Joint Statement expands the reciprocity provision beyond that contemplated in the Restructuring Legislation, by requiring that utilities and their affiliates be treated as a single entity with a single, combined group of customers. TANC and Metropolitan contend that the term "corporate affiliate" is vague and its interpretation could extend beyond the scope of the Restructuring Legislation to apply to joint power agencies or public benefit corporations, where the Board of Directors exerts no control over its member agencies. However, they do not object to the application of this provision to a utility holding company. Turlock requests clarification in the Phase II filings as to which state administrative and regulatory bodies would enforce this requirement, how such enforcement would be exercised, and whether such bodies have jurisdiction over local publicly owned electric utilities.

#### Structure and Governance of the PX

Several commenters assert that the proposal omits key elements of the PX structure, e.g.: conflict of interest standards for the board, staff and consultants; contracts to address the relationship among the ISO, the PX and market participants; information regarding what constitutes a "qualified supplier" or "qualified buyer" that can do business with the PX; and information about how the directors from the non-stakeholder/public class are to be selected. They argue that the Companies have not supplied sufficient information concerning the PX's rules, protocols and bylaws for the Commission to approve their proposed framework of the PX. 96/

CalEnergy argues that the WEPEX CEO, management and its entire staff should be free of any current or historical business dealings with the Companies or relationships with management of the Companies. It further argues that the Commission should require annual reports of the performance of WEPEX from an independent consulting firm. TANC notes that the PX will file on the Companies' behalf under section 205 of the FPA any new rate schedules and amended contracts, rules and protocols that change the rights, duties, or operations of the PX. TANC argues that a public utility that is truly independent should not be vested with the absolute authority to file for other public utilities, i.e., the PX must not be a surrogate for the Companies.

AWEA, while sympathetic to the start-up problems of the PX, believes that allowing utility employees to aid in setting up the PX would pose serious conflict-of-interest problems. AWEA would

prefer that the PX be restricted to hiring independent employees, at least for all senior positions.

Some commenters oppose the requirement that the Companies buy and sell through the PX for the first five years. CMA and CLECA assert that although participation by non-utility generators and other buyers would be on a voluntary basis, the bulk of the transactions will be conducted on a mandatory basis if the California Commission Decision is followed. They argue that such a mandatory provision runs contrary to the development of a competitive market and will be counterproductive for California consumers. For example, they argue that if cheaper power is available to the distribution utilities from sources other than the PX, the utilities should be free to purchase it for the benefit of their retail customers. Moreover, they contend that the mandatory nature of the PX runs counter to the purely voluntary pools which the Commission has approved in the past. They urge the Commission to require that participation in the PX be voluntary for all participants.

The ISO Users Group contends that the California Commission's mandatory buy/sell provision exceeds its authority, because the provision is a condition on the WEPEX Company's sales for resale, and a prohibition of voluntary bilateral interstate power transactions involving California utilities, which would infringe upon this Commission's exclusive jurisdiction. Moreover, it argues that the requirement would impose an unreasonable burden on interstate commerce by being an anticompetitive limitation on the wholesale power market. It argues that the requirement would deny access to the regional power market to California utilities and their underlying customers for five years. Further, the requirement would deny out-of-state utilities and generators access to the California market unless they abandoned the highly successful bilateral contracts now in use in favor of the untested and potentially inefficient PX.

The ISO Users Group further asserts that economics and operational concerns dictate that the PX would deter out-of-state utilities from transacting with California utilities. It cites the lack, in the PX, of the price certainty, market share certainty and long-term capacity rights of bilateral transactions. It also argues that bilateral contracts offer greater flexibility than the PX. For example, utilities that follow the Commission's open access tariff format and offer network and point-to-point services through the same tariff may be precluded from contracting with the Companies through the PX, which only operates a network service. Further, it contends that the grandfathering of existing contracts coupled with the mandatory buy/sell requirement discriminates against new entrants into the power market, and favors incumbent utilities holding long-term, bulk power contracts.

DWR and M-S-R assert that more information is required concerning whether and how the ISO and the PX will honor existing contracts.

Municipal and public power commenters note that they may not be permitted to join the ISO because of their operational limitations imposed by the Internal Revenue Service (IRS) on facilities financed with tax-exempt bonds. 97/ While noting the Companies' stated intent to preserve the rights of holders of existing contractual rights, APPA argues that implementation of the filings will change rights and the entities that will have to perform under existing contracts. For example, it asserts, transmission rights for an entity on a line controlled by SoCal Edison before ISO implementation and controlled by the ISO after implementation may have to be modified to continue to be assured.

CMUA states that although limited use of its members' facilities by nongovernmental persons is permitted under Federal tax laws, the substantial or uncontrolled use thereby would jeopardize the exemption of such interest from the date of issuance of the bonds issued to finance those facilities and could expose bondholders to substantial liability for taxes, interest and penalties for all open years. It states that such limitations need to be addressed prior to CMUA members participating in the PX and urges the Commission to ensure that public agencies and utilities that have utilized tax-exempt debt may participate in the PX to the maximum extent possible.

Several commenters opposed the proposed allocation of, and process of selecting, the board of directors. Some complained that the Companies dominated the WEPEX process and unilaterally changed the process of selecting board members from the original recommendation of the WEPEX participants. 98/ AWEA contends that basing the selection of the non-utility category of directors of the PX on the weighted average of kilowatt-hours sold into the PX builds in a bias toward the current players who dominate the market, discriminates against non-utility members that may participate in more "direct access" projects without participating in the PX, and favors larger units over smaller units. It argues that a number of independent power and non-utility organizations in California that should be represented in the PX directorship would be left out under the proposed structure.

CalEnergy argues that selecting the directors from the Non-utility Generators Group based solely on prior year historical generation is biased against new competitors. It further

97/ Protests of CMUA, APPA, San Francisco, LADWP, SMUD.

98/ Protests of Metropolitan, TANC, Modesto.

contends that the Companies' proposal to dictate all of the structural elements and contractual arrangements which will control WEPEX prior to when the independent board takes control has anticompetitive potential and should be restrained.

CMUA and Metropolitan propose a different makeup of the board, which they argue would provide a better balance of interests:

non-utility generators/sellers	- 5 directors
buyers/distribution companies	- 5 directors
end users	- 4 directors
non-stakeholder/public	- 2 directors

Total: 16

Further, they argue that determinations as to specific entities which should be included in the classes and how the directors in each class are selected should be made in a collaborative process.

DWR asserts that, contrary to the apparent assumptions of the Companies, DWR is not a municipal electric system and has relatively little in common with municipal operations. Rather, it is the Companies' largest transmission customer.

Commenters characterized the requirement to submit disputes to ADR prior to going to the Commission under section 206 of the FPA as supplanting their rights under the FPA. 99/ DWR contends that situation is exacerbated by its not being represented on the Governing Board by any entity resembling DWR. Metropolitan argues that an arrangement that is not the subject of dispute might require revision, i.e., where either or both parties to the arrangement might recognize the need for revision. In such circumstances, it argues that it would be inappropriate to require the parties to go through the dispute resolution process.

As noted above, the Restructuring Legislation imposes an additional layer to the proposed governance structure by establishing an Oversight Board consisting of five members to oversee the ISO and PX Governing Boards. The Oversight Board would have two primary functions. First, it would appoint the ISO and PX Governing Board members, which would be limited to California residents. Second, it would serve as an appellate body for review of ISO and PX Governing Board decisions. The Restructuring Legislation also prescribes a slightly different Governing Board composition.

99/ E.g., Protests of DWR, Metropolitan.

Companies' Answer

The Companies respond that, as proposed in their application, they could not dominate the board, because they would select directors in only the Distribution class and would select only three of the five directors selected by that class. They urge rejection of other arguments concerning the formation of classes, a desire for more votes, conflict of interest standards and the mechanics of the ADR process for the reasons stated concerning the ISO.

Commission Response

Governance, Organization and Structure

In Order No. 888, the Commission established guidelines on ISOs. 100/ The first ISO principle states that an ISO's governance "should be structured in a fair and non-discriminatory manner." This requires, among other things, that "an ISO should be independent of any individual market participant or any one class of participants." Furthermore, an "ISO's rules of governance should prevent control, and appearance of control of decision making by any class of participants." 101/ The participation of an independent ISO and PX is essential to the development of a complete and credible Phase II filing to implement the California restructuring proposal, consistent with this guideline. Therefore, we will require that certain Phase II filings in these proceedings be made by an independent ISO and PX, as authorized herein, rather than by the Companies.

Both the California Legislature and the California Commission have stated their intention that the ISO and PX commence operations no later than January 1, 1998. The Commission supports this endeavor. In order to afford the parties and the Commission sufficient time to evaluate these proposals and the ISO and PX sufficient time to implement any necessary changes consistent with this timetable, it is essential that the ISO and PX make their Phase II filings no later than March 31, 1997. Therefore, immediate formation of the ISO and PX is crucial to ensure that they will be able to make these filings.

The Commission also will accept the Companies' proposed organizational structure for the ISO and PX, which includes a Governing Board, CEO, audit and arbitration committees, and other subordinate committees as established. The Commission will defer ruling on the final structure until the bylaws governing the

100/ Order No. 888 at 31,730.

101/ Order No. 888 at 31,730-31.



selection and/or election of the Governing Board members, the CEO, and the committee members have been filed in Phase II.

We also will accept the Companies' proposed Governing Board class structure, as modified by the Restructuring Legislation. We note that several intervenors request a more refined class breakdown than that contained in the original application. These intervenors are concerned about being grouped with other market participants with different interests. The ISO and PX Governing Board class representation proposed in the Restructuring Legislation appears to address these concerns. Rather than the original board compositions (five classes for the ISO and PX), the Restructuring Legislation proposes eleven classes for the ISO and ten classes for the PX Governing Boards. We do not expect our approval to result in a significant change in the Companies' proposal. It appears that the classes described in the Restructuring Legislation fit within the make-up of the Governing Boards proposed by the Companies.

Similarly, Intervenors have raised concerns over the number of votes provided each class. We will defer making a final ruling on the voting representation of the various classes until a proposal is submitted in Phase II. However, we agree with the Companies that the voting structure should be guided by two overriding principles: 1) no one class should be able to block or veto action; and 2) no two classes should together be able to form a sufficient majority to make decisions. Moreover, as noted earlier, the Companies' proposal provides that an entity (including all affiliates and subsidiaries) may participate in only one class. Accordingly, with these restrictions and voting principles in place, we believe that with balanced representation, the Companies or any other class will not be able to dominate the Governing Boards.

The Companies have stated that both the ISO and PX will implement strict conflict of interest standards for Governing Board members, staff, and consultants. The Companies also state their intent to file a long-term staffing plan which will ensure the independence of the ISO and PX. 102/ We direct the ISO to file detailed bylaws, including conflict of interest standards that include the specific transition periods for employees to sever ties with former employers where applicable, in Phase II.

The California Commission is concerned that imposing conflict of interest standards on members of the ISO and PX Governing Boards could mandate abstentions and defeat the purpose of each board's composition, which is to balance the market interests in a manner that prevents any one stakeholder group from dominating the ISO or PX. In the PJM proceeding, the

102/ ISO Application at 33-34; PX Application at 37-38.

Commission clarified that there is flexibility in the methods used to implement the ISO principles. 103/ Here we have granted preliminary approval of the Governing Boards, which will consist of members representing various stakeholder interests. 104/ This type of board representation differs from a board with no stakeholders, i.e., a disinterested board. It may be appropriate with this type of board to develop a separate code of conduct for board members. Any code of conduct proposed for a representative board in Phase II must address how proprietary information will or will not be shared with stakeholders. If separate standards for the ISO and PX Governing Board members are proposed, we will review those in Phase II. In addition, the code of conduct proposed in Phase II for a representative board must address how the potential for abuse occasioned by access to proprietary information of the ISO will be prevented.

Finally, the Phase II filing should contain a detailed explanation of how the proposal complies with the applicable ISO principles enunciated by the Commission in Order No. 888. 105/

#### The Oversight Board

As provided for in the Restructuring Legislation, the Oversight Board will perform two primary functions: 1) it will establish nominating/qualification procedures, determine the composition of the board representation and select the ISO and PX Governing Board members both initially (Start-Up Function) and in the future; and 2) it will serve as a permanent appeal board for reviewing ISO Governing Board decisions (Appellate Function). 106/ In an effort to assist in the advancement of the California restructuring process, we will grant limited authorization to the Oversight Board's Start-up Function.

The Commission appreciates the California Legislature's and the Governor's strong, bipartisan endorsement of restructuring

103/ Atlantic City Electric Co., and PECO Energy Co., 77 FERC 61,148, mimeo at 36 (1996).

104/ As the Commission stated in the PJM proceeding "the applicant must address our concern that there be knowledgeable and effective administration of the ISO." Id. at 59. Of course, the requirement also would apply to the PX.

105/ See Order No. 888 at 31,730-32.

106/ The Restructuring Legislation does not specifically address this Commission's jurisdiction over the Oversight Board.

the electric industry that serves California. California is the first state in the Nation to enact a comprehensive restructuring plan by both the Commission and the Legislature. Both the California Commission and the California Legislature are widely recognized for the leadership role they have played in their pioneering restructuring efforts. The Legislature's prompt enactment of the comprehensive Restructuring Legislation eliminated any ambiguity about the State's desire to implement restructuring. We intend to give great weight to the views expressed in the Restructuring Legislation.

The Commission also recognizes the complexity of the restructuring process in California and recognizes how the Oversight Board may help expedite the establishment of the ISO and PX. As many parties have noted, the prompt creation of these two independent bodies is a critical element necessary to further develop the state's restructuring initiative. Therefore, we believe it is acceptable to allow the Oversight Board to perform a start-up function, subject to all determinations made by the Oversight Board being filed with the Commission for our final review in Phase II. 107/ However, as discussed below, the Commission cannot accept a permanent role for the Oversight Board in the governance or operations of the ISO, or appellate review of ISO Board decisions, because these matters are within our exclusive jurisdiction.

Once the ISO and PX are established and are up and running as jurisdictional entities, they must be flexible enough to respond to the market and allow for modifications to the governance provisions, including representation on the ISO and PX Governing Boards, and to the voting, eligibility, and terms of service of the various board members. We do not view the role of the Oversight Board as critical to the governance and operations of the ISO and PX once they become operational. Additionally, the Commission believes that the duties assigned to the Oversight Board under the California Restructuring Legislation will conflict with our statutory duties under the Federal Power Act. 108/ Therefore, we will require that the ISO and PX

107/ As discussed below, we find the California residency requirement to be inappropriate. That finding applies to the Oversight Board and to the initial ISO and PX Governing Boards established under the Oversight Board's start-up function.

108/ As noted above, and as the Companies, the California Legislature, the California Commission and the parties recognize, the ISO and PX will be public utilities subject to the Commission's jurisdiction under the Federal Power Act.

include in their bylaws to be filed in Phase II procedures for fulfilling governance functions after the initial start-up.

In Order No. 888, the Commission asserted its jurisdiction over ISOs. It stated: 109/

" . . . Because an ISO will be a public utility subject to our jurisdiction, 110/ the ISO's operating standards and procedures must be approved by the Commission. In addition, a properly constituted ISO is a means by which public utilities can comply with the Commission's non-discriminatory transmission tariff requirements. . ."

The Commission also announced eleven principles that it will apply in evaluating ISOs. These principles include the ISO's governance; independent structure; reliability and operations; efficiency of management; promotion of economic efficiency in use of and investment in generation, transmission, and consumption; the provision of electronic information systems; regional coordination; and dispute resolution process. 111/

The duties of the Oversight Board, as promulgated under the Restructuring Legislation, would involve, among other things, structure, governance, regional coordination, and dispute resolution functions of a public utility that operates interstate transmission facilities. Indeed, they would involve the very matters that we specifically addressed in Order No. 888. The actions of the Oversight Board therefore may delay or conflict with our ability to perform our statutory duty, as well as our stated intention, to regulate ISOs. Similarly, the Oversight Board would engage in an appellate function over matters that are within this Commission's exclusive jurisdiction. The Commission cannot delegate these responsibilities to an Oversight Board.

The Commission has exclusive jurisdiction under the FPA to regulate the rates, terms and conditions of transmission of electric energy in interstate commerce and sales for resale of electric energy in interstate commerce by public utilities. It

109/ Order No. 888 at 31,730-72.

110/ A public utility is any person that owns or operates facilities used for the transmission of electric energy in interstate commerce or the sale of electric energy at wholesale in interstate commerce. An ISO will operate facilities used for the transmission of electric energy in interstate commerce and thus will be subject to the Open Access and OASIS rules.

111/ Order No. 888 at 31,730-31.

is well established that Congress has the power under the Supremacy Clause of Article VI of the Constitution to preempt state law. 112/ Thus, the States may not legislate or promulgate regulations in areas that have been preempted by Federal Law or regulation. The preemption may result from federal agency action taken within the scope of its congressionally delegated authority. 113/ The Commission believes that the continuing functions of the Oversight Board established by the Restructuring Legislation would conflict with our statutory duties under the FPA and should not remain a part of the ISO structure, governance, and operations proposal.

Accordingly, the Phase II filing by the ISO and PX must provide governance and dispute resolution procedures that do not involve the Oversight Board. The ISO and PX will have to include in their proposed bylaws in Phase II provisions to replace outgoing Governing Board members that do not involve selection by the Oversight Board, as well as ADR procedures that do not involve appeal to the Oversight Board, consistent with this discussion.

#### Residency Requirement

The ISO and PX Governing Boards will have a direct effect on matters that are within this Commission's exclusive jurisdiction: sales for resale of electric energy in interstate commerce by public utilities and transmission of electric energy in interstate commerce by a public utility. Under section 205 of the FPA, rules, regulations, practices or contracts which in any manner affect or relate to jurisdictional rates or services must be filed with the Commission. Further, under sections 205 and 206 the Commission must ensure that regulations and practices that affect jurisdictional rates and services do not result in any undue discrimination or preference; the Commission has the authority, and indeed the obligation, to remedy such unduly discriminatory or preferential regulations and

112/ Northwest Central Pipeline Corp. v. State Corporation Commission of Kansas, 489 U.S. 493, 509 (1989). See also, Schneidwind v. ANR Pipeline Co., 485 U.S. 293, 300 (1988) (congressional intent to preempt will be inferred where, among other things, a "state law stands as an obstacle to the accomplishment of the full purposes and objectives of Congress.").

113/ Louisiana Pub. Serv. Comm'n v. FCC, 476 U.S. 355, 368-69 (1986).

practices. 114/ The Commission therefore as a matter of law must eliminate any unduly discriminatory or preferential provisions that relate to the Governing Boards that will oversee jurisdictional activities. As discussed below, the Governing Boards' residency requirement is such a provision.

While the Commission recognizes the difficulty of building a regional consensus on the structure of the new market, we believe that the requirement that all members of the ISO and PX Governing Boards be residents of California is unduly discriminatory. The Commission's primary goal in Order No. 888 was to provide for broad-based, non-discriminatory, open-access transmission service. Any provisions that limit the provision of non-discriminatory transmission service in interstate commerce, or that may unduly favor certain sellers or buyers to the exclusion of others, are inconsistent with that goal.

The residency requirement is inconsistent with the Commission's goal of ensuring broad-based transmission and will act to discourage participation in the ISO by out-of-state entities by denying them meaningful representation. If a board is not open to broad representation, it has the potential to result in undue discrimination and undue preference by favoring certain sellers or buyers to the exclusion of others. As recognized by the Joint Parties, in order to establish any measure of regional coordination, the governing structures of the ISO and PX must be open and accessible to all regional participants. In addition, the California-only residency requirement is at odds with the intention to allow and encourage non-discriminatory participation of non-California buyers and sellers in the ISO and PX.

In order to ensure that the structure of the ISO and PX is open and accessible to all stakeholders in the California restructuring, which may include non-California residents, the Governing Boards for the ISO and PX cannot be limited to California residents. Accordingly, we reject the California residency requirement.

#### Direct Access

In Order No. 888, the Commission stated that it has jurisdiction over rates, terms and conditions of the interstate transmission portion of any retail direct access transaction by a public utility (such as the ISO) that occurs voluntarily or as a

114/ Cf. *Central Iowa Power Coop. v. FERC*, 606 F.2d 1156 (D.C. Cir. 1979), in which the court upheld the Commission's determination that a restrictive membership provision in a power pooling agreement was unduly discriminatory under the FPA and must be modified.

result of a state retail access program. 115/ The Companies have proposed a direct access reciprocity condition that would apply to entities participating in both intrastate (in this context, within the State of California) and interstate transactions. In order for the Commission to act on this proposal, we direct the Companies and the California Commission to describe more clearly the scope of the proposed intrastate reciprocity condition. In addition, we direct the Companies to provide a more detailed description of their interstate reciprocity proposal. For example, the Companies should explain and fully support what result would obtain if another state did not implement retail access. Furthermore, the Companies should explain the effect on competition in California if, as a result of the proposed interstate reciprocity condition, transmission-owning utilities from outside of California, as well as their affiliates, were barred from competing in the California retail market. Would those utilities be able to participate in the ISO and PX? Finally, the Companies are directed to explain their proposals in light of the restrictions in sections 212 (g) and 212 (h)(1) of the FPA. We also invite all other parties, including the California Commission, to comment on these issues.

Several non-public utilities request clarification on the meaning of "corporate affiliates" with respect to the reciprocity condition. These entities are concerned that all members of their organizations will be affected by one member's actions. In Order No. 888, in response to arguments raised by cooperatives and joint action agencies, we agreed to limit the reciprocity condition to only corporate affiliates. 116/

As originally filed, the ISO is responsible for enforcing the intrastate direct access reciprocity condition. Some intervenors argued that it is inappropriate for the ISO to perform this function. We note that the Restructuring Legislation codified the intrastate reciprocity condition, and, as pointed out by the Joint Parties, disputes can now be taken directly to the courts. In light of the Restructuring Legislation it will no longer be necessary for the ISO to enforce the direct access reciprocity condition. Therefore, the intervenors' arguments are moot.

115/ Order No. 888 at 31,781.

116/ Order No. 888 at 31,763.

### Alternative Dispute Resolution Procedure

As described above, the Companies have proposed a "baseball" type arbitration step as part of their ADR process, whereby each party submits its best single offer and the arbitration panel accepts one of the parties' proposals. The Companies state that this type of arbitration procedure will engender reasonable settlement proposals from the interested parties since unreasonable proposals will be rejected by the arbitration panel. The Companies state that their proposed ADR procedure is based on the ADR procedure accepted by the Commission in the WRTA Agreement.

Our review indicates that there are certain differences between the ADR procedure outlined in the WRTA Agreement and that proposed by the Companies. Specifically, the ADR process outlined in the WRTA Agreement provides the arbiter more discretion in determining whether the parties' best offers are consistent with then-applicable Commission standards and policies. 117/ We direct the Companies to incorporate in their Phase II ADR proposal the additional flexibility provided arbiters under the WRTA ADR procedure.

### Super-Majority Voting Requirement

As noted above, the California Commission recommends that the ISO Governing Board be permitted to approve certain actions (such as creating new congestion zones; recommending transmission upgrades; standardizing maintenance, rating and operating standards, and offering new services) with a simple majority vote rather than by a super-majority vote. The Commission agrees in part with the California Commission's recommendations. With regard to the standardization of maintenance, rating and operating standards, and the offering of new services, the Commission agrees that the ISO should have the flexibility to respond to changes in the marketplace. As the sole proprietor of certain critical services and the single entity charged with maintaining the stability and reliability of the transmission system, the ISO must have the ability to respond to changing circumstances and conditions and not be constrained by a super-majority voting requirement that may unnecessarily delay needed revisions to standard operating practices.

We will not address the California Commission's recommendations for a simple majority vote to create new congestion zones or recommend transmission upgrades at this time. As discussed later in this order, the zonal transmission congestion pricing and transmission expansion proposals require greater detail. Therefore, we will address the voting

117/ See Section 12.3 of the WRTA Agreement.



requirements pertaining to these matters in Phase II. We disagree with CalEnergy's interpretation that the Restructuring Legislation only requires a simple majority vote for all ISO Governing Board actions. It is our opinion that the Restructuring Legislation's reference to "majority decisions" is applicable to either a simple or super majority and that the Companies' proposal to require a super-majority for most Governing Board actions appears to be reasonable.

#### Periodic Review

As described in the application, the Companies propose to include in the ISO and PX bylaws a requirement that the Governing Boards submit to the Commission every five years a recommendation on whether the class structure needs to be modified, with the first such filing to be made after three years. The Commission agrees that the ISO's and PX's governance structure should be reviewed initially after the first three years of operation. The Commission will also consider the necessity of further reviews at that time. We decline to adopt suggestions by the California Commission and others that we conduct this review sooner and/or more often. We also decline to adopt EPUC's recommendation that we adopt a monitoring program to review the overall workings and structure of the ISO and PX. We believe that a periodic review, as supplemented by section 206, will ensure that the structure and functions of the ISO and PX are reasonable. The ISO needs sufficient operational experience to afford a meaningful review. We doubt that one or two years of experience is a sufficient amount of time. However, we note that any interested party has the right to file a Section 206 request for review of the ISO's governance structure at any time, or the Commission may institute an investigation on its own motion at any time. Finally, we decline to adopt EPUC's recommendation that we consider the need for an ISO technical advisory committee. As proposed, the ISO and PX Governing Boards will have the ability to form subordinate advisory committees in order to address certain issues and therefore Commission action is unnecessary.

#### Existing Contracts

The Phase II filing should contain a complete list of all existing contractual arrangements. The Phase II filing should explain in detail how existing contractual arrangements will be handled by both the PX and the ISO. To the extent such existing contractual arrangements conflict with the protocols and operating practices proposed under either the ISO or the PX, the Phase II filing should explain how the ISO and PX will reconcile these differences and accommodate the arrangements on a non-discriminatory and comparable basis.

For example, the California Commission states that the distinction between firm and nonfirm transmission service may

no longer be applicable or recognized under the new market structure. The Phase II filing must address how the ISO will provide the existing contractual obligations under its operations.

In addition, the Phase II filing must address how existing bilateral sales of non-firm energy, system power, and unit power, as well as existing requirements service will be provided under the PX's operating protocols. Finally, the Phase II filing must specifically address how existing firm entitlements will be automatically scheduled into and through the PX and ISO in constrained situations and what priority these transactions will have vis a vis other PX and ISO schedules.

Moreover, we agree with the California Commission's statements that the ISO be available to advise parties regarding the renegotiation of existing contracts. To the extent parties wish to honor or renegotiate existing contracts the ISO should, at a minimum, be available for consultation on all technical or operational issues.

D. The Application To Transfer Operational Control To An Independent System Operator.

1. Authorization Under Section 203 of the FPA to Transfer Operational Control to the ISO.

As noted in the Joint Statement, the Restructuring Legislation identifies additional ISO responsibilities not specifically addressed in the ISO Application. These responsibilities for the most part concern system reliability. For example, section 348 of The Restructuring Legislation requires the ISO to adopt inspection, maintenance, repair and replacement standards for the transmission facilities under its control. Section 349 requires the ISO to perform a review following a major outage. Furthermore, if the ISO finds that the operation and maintenance practices of the transmission facility owner or operator prolonged the response time or contributed to an outage, the ISO may order appropriate sanctions, subject to Commission approval. Section 350 requires the ISO to prepare reports based on various reliability and maintenance criteria. In addition, section 360 provides that the California Commission shall ensure that filings are made with the Commission giving the ISO the authority to secure generating and transmission resources necessary to guarantee achievement of planning and operating reserve criteria no less stringent than those established by WSCC and NERC. The Joint Statement indicates that the Phase II filings will describe how these expanded responsibilities will be accomplished.

The Joint Statement notes that the Restructuring Legislation does not address the extent or nature of the ISO's control over

transmission facilities. The Companies state that "[w]hile the ISO will have the necessary authority over all ISO transmission facilities, criteria will be developed as part of the Phase II filings to determine which transmission facilities will be under the control of the ISO." 118/

In its supplemental comments, the California Commission maintains that the facilities the ISO needs to control will be determined more by practical operational necessities that will become apparent after the ISO is up and running than by any fixed determination made at this time. The California Commission asserts that the facilities under the control of the ISO may or may not include all Commission jurisdictional facilities and that the ISO's ability or need to control facilities may change over time.

In addition, the California Commission requests that the ISO be permitted to: 1) own the necessary information technology (i.e., metering equipment and SCADA equipment) to efficiently monitor the power grid; and 2) standardize the operation and maintenance procedures, ratings, and remedial action plans (consistent with WSCC criteria) of each of the Companies. The California Commission states that these recommended changes will permit the ISO to fulfill its responsibilities to maintain the reliability of the grid and to change any potentially conflicting standards among the Companies operating procedures.

In response to the California Commission, the Companies agree with the recommendation that the ISO be given the authority to develop a standard set of operation and maintenance and other procedures that are consistent with WSCC criteria. The Companies state that the WSCC is in the process of revising its criteria, but that the process of combining the individual transmission owners' criteria into a single agreed-upon set will require extended discussions. In the meantime, the Companies contend that the ISO will have to comply with the reliability standards of NERC, WSCC, and each transmission owner.

The Companies also state that the California Commission's recommendation that the ISO be permitted to own monitoring equipment may be unnecessary. Although the ISO as proposed can own monitoring equipment, the ISO can obtain access to information from existing transmission owner equipment.

## Commission Response

We find that the proposed transfer of control of the Companies' jurisdictional transmission facilities to the ISO is consistent with the public interest and should be conditionally authorized subject to future filings and certain conditions as discussed below. There are a number of unresolved issues concerning the ISO that affect our decision.

First, the ISO has not yet been formed. Moreover, the facilities subject to its control and the extent of its operational control have not been determined. It therefore would be premature to grant unconditional Section 203 authorization at this time. Consequently, as a condition to our final approval of Companies' transfer of operational control over their transmission facilities, we will require that once the proposed agreements are drafted which adequately specify the facilities and the extent of operational control over jurisdictional facilities being transferred, such agreements must be filed with and approved by the Commission in Phase II.

Second, to the extent the ISO determines in Phase II that other facilities need to be transferred to its control in order to operate reliably, the Companies must agree to transfer operational control of the additional facilities. The ISO must, of necessity, have the authority to decide what facilities will constitute the ISO Grid. The ISO must independently determine which facilities it deems necessary to fulfill its control area responsibilities. Therefore, as a condition to authorization, the Companies must agree that they will honor any subsequent ISO determination with respect to the facilities it deems necessary to perform its control area operation functions.

Third, the Phase II filing must demonstrate that the transmission facilities that will be under the ISO's operational control will be sufficient to mitigate the Companies' transmission market power. In connection with this showing, we note that the Companies state that it may be necessary to provide transmission services to wholesale customers over facilities that will not be placed under the ISO's control. Specifically, SoCal Edison and PG&E will file open-access tariffs for wholesale service over non-ISO facilities, to become effective concurrently with the commencement of ISO operation.<sup>119/</sup> Therefore, SoCal Edison and PG&E must demonstrate that their individual tariffs in conjunction with the ISO tariff will not allow the exercise of transmission market power.

<sup>119/</sup> San Diego does not currently serve any wholesale customers over facilities that will not be controlled by the ISO.

As stated above, it is premature to prescribe at this time the exact facilities that the ISO will initially need to operate in order to fulfill its control area responsibilities. We realize that the formation of the ISO is a work in progress, and that the establishment of the ISO may be implemented in any number of possible ways (e.g., a staggered or phased implementation). Accordingly, we agree with the California Commission's conclusion that the facilities under the control of the ISO may or may not include all Commission jurisdictional facilities. Furthermore, we are not now prepared to rule on cost responsibility issues. However, we have some concerns regarding operational issues, and provide guidance, as discussed below.

Consistent with our determination in Docket No. EL96-48-000, we grant the Companies request for clarification that the initial delineation of facilities that are subject to ISO control can change as the uses of the facilities change and that facilities may have multiple uses for operational control purposes. However, we will require that the ISO maintain a comprehensive list of the facilities under its operational control. It may be appropriate for the ISO to maintain such information on its OASIS. If different categories of operational control are established or operational control of certain facilities is delegated to others, the ISO must maintain this information in a current and comprehensive manner. As the uses of facilities change over time, it will also be necessary to clearly record all such changes.

While we recognize that uses of facilities will not be constant over time, we wish to establish clear lines of responsibility between the facilities controlled by the ISO and those controlled by the Companies. For example, if it becomes necessary for the ISO to temporarily take control of certain facilities that are normally under the operational control of SoCal Edison (e.g. in the event of a system contingency that requires closing certain breakers that may normally be operated in an open configuration), we will require that the ISO develop procedures and maintain records that clearly indicate which facilities are under the operational control of the ISO at any particular point in time. The Commission feels strongly that as a matter of safety and reliability, operational responsibility must be clearly defined at all times. Again, it may be appropriate for the ISO to maintain the information for this category of changes in operational control on its OASIS.

As stated above, facilities under ISO operational control may change because: (1) facilities may have multiple uses and the uses of the facilities may change over time; and (2) in response to system conditions, the ISO may temporarily take control of facilities normally under the operational control of the Companies. In an effort to ensure maximum flexibility and administrative convenience, we will direct the ISO in its Phase

II filing to propose a procedure to advise the Commission (and all other parties) in a timely manner of subsequent transfers of operational control of jurisdictional facilities between the ISO and the Companies. For example, the ISO may propose a list of criteria that will indicate how changes in the use of facilities will cause operational control of facilities to change. Similarly, for the second category of facilities temporarily operated by the ISO, it may be appropriate to list the criteria that will be used for making such determinations. The ISO and the Companies also must propose a procedure for future section 203 filings with the Commission for all such changes in operational control of facilities. All interested parties would be allowed to file comments on such filings.

We note that under the Companies' proposal, the ISO will be obligated, at a minimum, to meet WSCC's, NERC's and each company's specific reliability requirements and operating guidelines. The Restructuring Legislation further specifies ISO requirements to achieve certain WSCC and NERC criteria. The Commission considers these responsibilities critical to the reliable operation of the ISO. 120/ Furthermore, we will require the ISO to be a member of WSCC and WRTA. To the extent further Commission authorization is required for the ISO to fulfill expanded control area responsibilities (e.g., imposition of sanctions), 121/ the Commission will consider such requests in the Phase II filing.

The Commission agrees with Restructuring Legislation provisions as well as the statements of the California Commission and others, that the ISO should establish standardized operation and maintenance, ratings, and remedial action plans.

Finally, we believe that the ISO should have the discretion to own, and/or contract for, any monitoring or information technology that it may require in order to reliably and efficiently manage the ISO grid. Consistent with our discussion above, the Companies must agree to honor any ISO determination with regard to the monitoring and information equipment the ISO may deem necessary to operate the ISO grid. In addition, the Companies have stated their intent to establish a transmission system information network, or OASIS. The Commission directs the

120/ As the Commission stated in the PJM proceeding, ". . . a prerequisite to the formation of any ISO that would be acceptable to the Commission would include a commitment to comply with the standards set by NERC and the appropriate regional reliability council." See Atlantic City Electric Co., et al., and PECO Energy Co., 77 FERC 61,148, mimeo at 45 (1996).

121/ See Restructuring Legislation 349.

ISO to develop, and file in Phase II, an information network that is consistent with the Commission's OASIS network outlined in Order No. 889. 122/

## 2. Transmission Pricing Issues

### A. Transmission Access Fee

Led by CMUA, numerous intervenors oppose the Companies' transmission pricing proposal. 123/ For example, Los Angeles contends that the Companies' pricing proposal would shift benefits from customers such as those on Los Angeles' system, which invested heavily in transmission assets, to all ISO customers that would be able to use these assets at no additional cost.

EPUC supports the Companies' proposal, and suggests that the Commission defer to the California Commission on cost allocation. However, EPUC requests that the Commission make sure that customers pay only for facilities they use.

CMUA opposes the service area-based access fee proposal as inappropriate for an integrated ISO. Southern Cities, Azusa and Banning, NCPA, and Redding support this position. CMUA claims the access fee violates the Commission's transmission pricing principles, and is not the best proposal for the future of integrated grid operation. In view of the system integration under the ISO, CMUA states that the access fee should (1) recognize benefits of pooled transmission, (2) provide for economic expansion of the grid in response to growth and market, and (3) mitigate the ability to exercise market power. CMUA contends that the Companies' proposal doesn't allocate costs consistent with benefits of the integrated grid.

A number of intervenors, including CMUA and Los Angeles, argue that the Companies' pricing proposal doesn't comply with the Commission's transmission Pricing Policy Statement or the principles for ISOs established in Order No. 888. According to these parties, the Companies' proposal fails to comply with principles of cost causation, recovery of total revenue requirements for all transmission owners, price comparability,

122/ Open Access Same-Time Information System (formerly Real-Time Information Networks) and Standards of Conduct, Order No. 889, 61 Fed. Reg. 21737 (May 10, 1996), FERC Stats. & Regs. 31,035 (1996) (OASIS or Order No. 889).

123/ Among others, SMUD, TANC, LADWP, Southern Cities, NCPA, the City of Palo Alto, California (Palo Alto), and the City of Redding, California (Redding) support CMUA's position.

efficiency, avoidance of cost shifts, fairness, practicality, and avoidance of pancaked rates or "and" pricing.

Several intervenors claim the proposed access fee violates cost causation principles. For example, Los Angeles states that the self-sufficiency test creates subsidized use of the integrated regional transmission grid and is not an acceptable way for the ISO to expand the grid and mitigate market power. 124/ Similarly, CMUA argues that the test locks in historical patterns based on location, regardless of cost causation in the context of network service. Some intervenors argue that the proposal to charge wheeling customers the transmission access fee of the transmission owner located at the point the power exits the grid is inconsistent with cost causation principles as well as recovery of the transmission owners' revenue requirements. 125/

CMUA and Southern Cities argue that the Companies' proposal does not meet the Commission's revenue requirement standard because the proposal is designed to recover only the Companies' revenue requirements, not the revenue requirements of the other transmission owners making facilities available to the ISO.

Some intervenors argue for close scrutiny of ISO costs such as control centers, computers, and other equipment, since these costs will end up in the ISO charges. Also, other transmission owners may have available equipment they should have the right to bid or lease to the ISO. 126/

CMUA argues that the Companies' proposal fails to meet the comparability standard, because access charges are based on location. 127/ Also, some intervenors argue that wheeling-through transactions violate the comparability standard. For example, CMUA argues that different rates apply to North to South transactions than would apply to South to North transactions, even if the same parties and same distances are involved.

CMUA argues that the Companies' proposal is economically inefficient, because it provides incentives for participants to oppose system expansion projects, and because the self-sufficiency test will provide transmission-dependent utilities incentives to locate generation where it would increase

124/ See, e.g., Protests of APPA, NCPA, CMUA, Redding, Vernon, and M-S-R.

125/ See Protests of CMUA, Redding and Los Angeles.

126/ See Protests of Redding and DWR.

127/ Southern Cities support CMUA's position.



congestion. SoCal Gas argues that the Companies' proposal fails to consider the long-run investment implications of location of additional generation, transmission and customers' investments.

A number of intervenors argue that significant cost shifts would result from the proposal to roll in rates within the Companies' service areas. This is particularly true for customers in PG&E's control area, where the company had sub-functionalized its transmission system into five unbundled functions years ago. 128/ They also argue that the proposed rate design will cause major cost shifts to some transmission dependent utilities such as SMUD, 129/ or benefits shifts away from transmission owners that invested in higher cost facilities. 130/ Metropolitan argues that the proposed access charges only prevent cost shifts among the three utilities and don't address the problem of cost shifts that will occur among customer classes within a utility's service territory.

CMUA contends that the proposed access fee violates the single tariff requirement in Order No. 888. CMUA states the proposal to charge transmission dependent utilities an additional amount is unclear, and may result in significant additional costs through pancaked rates for the transmission dependent utilities. CMUA also argues that proposed access fees are not a grid-wide tariff or a single rate since the access fee is different for each Company's control area.

CMUA proposes an alternative transmission access fee, which it claims satisfies the Commission's pricing policies, encourages broad ISO participation, and best fits the future expected operation of the California market. Under CMUA's proposal, the ISO would identify facilities as regional transmission facilities (RTF), local transmission facilities (LTF), and generation tie facilities (GTF). The ISO technical committee would make a recommendation to its Board regarding this delineation on a case by case basis. Once grouped in the categories, costs would be allocated accordingly, and combined function facilities would be apportioned equitably. Regarding rate design, CMUA suggests a single, ISO-Wide RTF rate based on RTF costs divided by expected peak demand, adjusted for wheeling through consumers who also would pay the RTF rate. Various LTF rates would correspond to the local area costs. The Companies, SoCal Gas, and San Francisco oppose CMUA's rate design proposal. San Francisco claims it would result in huge cost shifts to the customers of PG&E.

128/ See, e.g., Protests of DWR and CMUA.

129/ See, e.g., Protests of CMUA and SMUD.

130/ See Protest of Los Angeles.

SoCal Gas proposes a two-part access fee that it contends will recognize the functional differences on the ISO grid, would promote economic efficiency, and would diminish unintended consequences to the natural gas industry. SoCal argues that the Companies have not adequately examined the use of a two-part access fee with local and non-local differentiation. According to SoCal Gas, its two-part fee is economically efficient, since it recognizes the two separate functional uses of the ISO system: (a) to import power from out of state, and (b) to provide power to the electric distribution network. SoCal gas argues its proposal also would avoid disadvantages to the natural gas generation industry. SoCal Gas argues that its proposal meets all of the criteria set forth in the Commission's Transmission Pricing Policy Statement.

The California Commission maintains that it is premature to support a specific rate design for the access fee at this time. However, to assist in the collaborative effort for the Phase II filing, the California Commission suggests some general guidance. For example, the California Commission supports time-differentiated transmission pricing. The California Commission notes that the proposed transmission access charge will alleviate pancaking across systems (horizontal pancaking) because only one transmission access fee will be charged for use of the ISO grid facilities. However, depending on how transmission service is unbundled, the California Commission is concerned that the transmission access fee rate design may provide for vertical or internal pancaking. Therefore, the California Commission recommends that the Commission require the parties to develop solutions that avoid internal pancaking.

In response to the California Commission's statement in favor of cost causation, the Companies assert that this statement should not be read to be an endorsement of the proposals of the municipal entities or Socal Gas. Moreover, the Companies believe that the initial access charge may be resolved by the Restructuring Legislation. To the extent it has not been resolved, the Companies state that the California Commission's access charge recommendations should be addressed in Phase II.

The Companies also argue that the access charge allocates sunk costs, rather than incremental costs (which would be allocated through usage charges and losses). Citing Professor Hogan's testimony at the Commission's August 1, 1996 Technical Conference, the Companies note that the allocation of sunk costs should be accomplished in such a way as to avoid influencing usage patterns and dispatch. 131/

In response to the California Commission's recommendation that the ISO offer pricing reflecting time-differentiated demand, the Companies point out that their usage charges and losses are time-sensitive, and that time sensitive transmission access charges may be examined in Phase II of these proceedings.

The Companies dispute the California Commission's concern that internal rate pancaking may occur, because the Companies will have turned over to the ISO all of their transmission facilities. Thus, customers would pay a single access charge for transmission and a separate charge for distribution. Therefore, the Companies assert that internal pancaking could only occur if other transmission owners do not join the ISO or if they do not transfer control of all of their transmission facilities to the ISO. The Companies believe this may be resolved by the Restructuring Legislation's policy encouraging local publicly-owned utilities to join the ISO.

In the Joint Statement, the Joint Parties state that the Restructuring Legislation affects, among other things, the transmission access charge. The Companies state that section 9600(a) of the Restructuring Legislation endorses initial adoption of the proposed access charge framework and establishes a process to resolve the matter, subject to Commission approval, during the first two years of ISO operation. 132/

In response to the Joint Statement, many commenters, including SoCal Gas, DWR, Watson, TANC, Metropolitan, SMUD, Azusa and Banning, Vernon, and NCPA contend the Joint Parties overstate the Restructuring Legislation's import regarding the initial rate methodology. These commenters dispute the Joint Parties' claim that the Restructuring Legislation specifies the ISO's initial rate methodology to be the methodology proposed in the application. According to these commenters, the parties are not precluded from challenging, and the Commission is not precluded from rejecting, the methodology to be proposed by each company in its initial transmission access charge. As TANC states, the Restructuring Legislation merely sanctions the concept of a utility-specific access charge for an interim period, and no party is precluded from raising any issues related to this charge. Moreover, NCPA points out that the initial rate should be revenue neutral and not adversely affect contract rights.

Regarding the long-term pricing methodology, CMUA states that the Restructuring Legislation prescribes important principles that the ISO must follow in making a proposal and that the legislation prescribes in detail a default pricing mechanism if the parties do not reach agreement. SoCal Gas comments that its proposal is consistent with the spirit of the Restructuring

Legislation. Many commenters, including NCPA, CMUA, DWR, SMUD, Azusa and Banning, and San Francisco emphasize the importance of honoring existing contracts. SMUD also comments that the Companies need to clarify their proposed treatment of wheeling revenues in light of the Restructuring Legislation requirement that such revenues be retained by transmission owners. In addition, San Francisco and CMUA note with concern the comment in the Joint Statement that the Companies are working with stakeholders to develop a long term rate methodology, because it is the ISO, not the Companies, that must develop the rate proposal.

SMUD reiterates its position, recognized in the Restructuring Legislation, that the participation of many publicly owned utilities such as SMUD will depend on the ability of such utilities to transfer facilities without jeopardizing the tax exempt status of their bond financing.

CalEnergy requests that the Commission provide guidance as to whether the Restructuring Legislation pricing provisions are acceptable, because, in CalEnergy's view, the Restructuring Legislation appears to have superseded the Companies' transmission access pricing proposal.

TANC states that although the Restructuring Legislation provides a rate methodology applicable to new facilities, this does not diminish the Commission's authority to approve such methodology or the resulting rates.

The California Commission supports the principle of allocating costs based on cost causation and states that it will use this approach in reviewing the Phase II application. It supports a timely consensus on these issues resulting from the framework established in the Restructuring Legislation and from ongoing negotiations.

#### Commission Response

In Order No. 888, the Commission concluded that it has jurisdiction over the transmission component of an unbundled interstate retail wheeling transaction provided by a public utility.<sup>133/</sup> In instances of unbundled retail wheeling that occurs as a result of a state retail access program, the Commission stated that it will defer to recommendations by state regulatory authorities in certain matters, including how to allocate costs for such facilities to be included in rates, provided such recommendations are consistent with the essential

<sup>133/</sup> Order No. 888 at 31,784.

elements of Order No. 888. 134/ In this regard, we encouraged public utilities and their state regulatory authorities to attempt to agree to utility-specific classifications and allocations that the utility may file at the Commission.

Our preliminary review indicates that the Companies' transmission access charge rate proposal appears to be a reasonable method of recovering their individual transmission revenue requirements. 135/ Consistent with Order No. 888, we direct the Companies to continue to consult with the California Commission in preparing the details for their Phase II filings. We remind the Companies that the Phase II filings must include complete section 35.13 cost support in sufficient detail to support the proposed cost allocation and rate design. 136/ A number of intervenors have commented that they reserve the right to protest or comment on the Companies' rate filings in Phase II. We assure the parties that we will afford them an opportunity to present their views on these and all other aspects of the Phase II filings.

An integral component of the Companies' transmission access charge is the "self-sufficiency" test. We note that many intervenors express uncertainty about this concept. We agree. The Phase II filing should provide greater detail regarding the calculation and ratemaking effect of this test. Specifically, the Phase II filing must include an explanation of how charges collected from an entity will be credited back to the transmission owner whose system the customer utilizes. The Phase II filing should also clearly define dependable generation and firm import capability, and should explain why these criteria are necessarily accurate indicators that a utility is not dependent upon the transmission system of another transmission-owning utility.

Finally, the Commission is concerned that one aspect of the Companies' access charge proposal may prove to be unduly discriminatory. In light of SoCal Edison's decision to exclude

134/ Id.

135/ In our recent action on the proposed restructuring of the PJM power pool, we stated we would accept the Supporting Companies' zonal rate pricing methodology for an initial period because it avoided significant cost shifting. Similarly, we would accept the Companies' proposal for an initial period for the same reason. (See Atlantic City Electric Co., et al. and PECO Energy Co., 77 FERC 61,148 (1996).)

136/ See 18 C.F.R. 35.13 (1996).

from the ISO grid certain facilities which may be used to serve certain wholesale customers in the future, wholesale customers located within SoCal Edison's service territory may have to obtain service under two separate Commission-jurisdictional tariffs. To the extent other ISO transmission customers have access to the transmission system under a single tariff, SoCal Edison customers may raise a legitimate concern regarding discriminatory treatment. As we have previously stated, it will be necessary to address these and other concerns in the Phase II filing. 137/

The Restructuring Legislation outlines a process whereby the ISO staff and Governing Board have a two-year period to study the original access charge methodology and to evaluate alternatives based on certain principles including an equitable balance of costs and benefits. The legislation outlines three possible procedural outcomes for determining the ISO's access charge. First, if the ISO Governing Board reaches a consensus on a proposed rate methodology, it will then submit its recommendation to the Commission. The ISO Governing Board is free to select any access charge rate methodology advocated in these proceedings (e.g., a utility-specific, regional-local, or state-wide ISO rate methodology).

Second, if the ISO Governing Board fails to reach a consensus decision on the rate methodology, the rate methodology will be determined through the ISO's ADR process. If the ADR process is successful, the rate methodology will be filed with the Commission. Finally, if the ADR process is unsuccessful, the Restructuring Legislation provides that the ISO will recommend to the Commission a two-part default rate methodology consisting of (1) a uniform regional transmission access charge; and (2) a utility-specific local transmission access charge. 138/

Regardless of the procedural process, the ISO-recommended rate methodology is to be filed with the Commission at least sixty days before the end of the two-year period. If the ISO Governing Board-recommended or the ADR-recommended rate

137/ PG&E proposes that most of its transmission facilities under the ISO Tariff be based on rolled-in rates (as opposed to its historical sub-functionalized rate design). PG&E also proposes to file a separate tariff for wholesale transmission service over non-ISO facilities. In its Phase II filing, it will be necessary for PG&E to support its rate design and its use of multiple tariffs.

138/ Section 9600(a)(2)(C) of the Restructuring Legislation defines regional facilities as transmission facilities operating at or above 230 kV plus an appropriate percentage of lower voltage transmission facilities.

methodology is accepted, the rates are proposed to go into effect when the two-year period ends. The default rate methodology is proposed to become effective on the later of the end of the two-year period or the termination of the stranded cost recovery period.

The Commission finds that the procedures outlined in the Restructuring Legislation are consistent with Order No. 888. As stated above, Order No. 888 encourages public utilities and their state regulatory authorities to attempt to agree on all classifications and ratemaking allocations to be filed with the Commission. The consensus-building process of the Restructuring Legislation is consistent with this guidance.

In addition, our preliminary review of the alternative default rate design indicates that it is also a reasonable method for recovering transmission costs. The default methodology, as described in the Restructuring Legislation, appears to closely resemble the proposal of CMUA and other public entities. CMUA argues that such a regional rate design is appropriate because it more closely tracks usage, compensates all transmission owners fairly, and is generally more consistent with the Commission's Order No. 888 than the Companies' proposal.<sup>139/</sup> A properly designed transmission rate, consistent with the principles described by CMUA, represents an acceptable alternative transmission rate applicable for ISO service. It is also our understanding that agreement on the default rate methodology was an integral part of the negotiations between all the affected parties in the drafting of the legislation.

The third procedural outcome under the Restructuring Legislation provides for a consensus rate design resolved through the ADR process. As previously stated, the Commission encourages such a process. As with any of the three procedural outcomes, however, any change in rate must be timely filed with the Commission under Section 205.

#### Tracking Account

The Restructuring Legislation also provides for the establishment of "tracking accounts," which would record the difference between the new ISO transmission rates (i.e., one of the procedural outcomes outlined above), and the prior rates proposed by the Companies. A tracking account would be established only if the new ISO transmission rate is established under either the ISO Governing Board or ADR recommended procedures outlined above. In addition, if the resulting rates for any transmission owner are the same as the prior rates, the rates would take effect immediately and a tracking account would

<sup>139/</sup> CMUA Protest at 31-50.

not be necessary. Under the Restructuring Legislation, if the alternative default ISO transmission rate design is ultimately approved by the Commission, no tracking account will be established.

The accumulated amounts recorded in any tracking accounts would be collected from customers after the retail stranded cost recovery period ends on December 31, 2001. The Restructuring Legislation provides that the amounts in the tracking accounts would be collected over a three-year period in the case of investor owned utilities, and over a five-year period in the case of local publicly-owned utilities. Any amount collected from customers that exceeds the amount a transmission owner is allowed to collect through the new rates would be paid to the appropriate other transmission owners.

The Commission finds that in the context of California's electric restructuring initiative, the tracking account concept as proposed by the Restructuring Legislation appears acceptable. The Commission understands that the tracking account concept outlined in the Restructuring Legislation is an integral component of the compromise reached among the various stakeholders in the drafting of the Restructuring Legislation. The tracking account will be implemented only if the rate methodology of the ISO Governing Board or the ADR process differs from the Companies' proposed rate design. In either event, all of the stakeholders would be represented in the process and their concerns would have been fully considered in the derivation of the ISO transmission rate.

The tracking account mechanism is a means to allow sufficient time for the stakeholders to reach a consensus on the appropriate ISO rate design. If an agreement is ultimately reached, the tracking mechanism will allow the ultimate ISO rate design, in essence, to become effective at the time the ISO becomes operational.

However, the Commission requires clarification regarding several aspects of the tracking account. First, as discussed earlier, the Companies propose to utilize balancing accounts which would, for each transmission owner, match the Commission approved cost of transmission with the actual revenue intended to meet those targets, and would accrue interest (presumably pursuant to 18 C.F.R. 35.19a). The accumulated over- or under-collections would be amortized over the next succeeding rate period for each transmission owner. The Phase II filing must clarify whether the Companies continue to propose to utilize balancing accounts in conjunction with the Restructuring Legislation's tracking account mechanism, and, if so, how these two mechanisms would operate together and the proposed duration of the balancing account. Second, it is unclear how and for what duration refunds or surcharges under these accounts would be



imposed. Third, the Commission asks the Companies to clarify how these proposed tracking mechanisms will not result in retroactive ratemaking.

B. Congestion Pricing and Usage Charges.

Several intervenors contend that the Companies' congestion management proposal is incomplete. For example, CMUA argues that the congestion management proposal needs to be viewed in relation to the ISO's policies on transmission expansion, the access charge methodology, the administration of TCCs, and the congestion crediting mechanisms, which have not been fleshed out yet.<sup>140/</sup> Similarly, Palo Alto argues that the Companies' TCC proposal may imply that congestion revenues flow to all customers, within and without the congestion zone. Palo Alto contends that revenues should remain within the congestion zone.

San Francisco objects to the Companies' proposal to designate the San Francisco area as a congestion zone. San Francisco argues that the Companies have failed to demonstrate that the transfer capacity into the San Francisco area will be constrained. San Francisco also argues that any cost differential between the city and the area outside the zone is a cost of system reliability and not a transmission constraint, and that out of merit order dispatch necessary to serve San Francisco load should be treated as an ancillary service, such as spinning reserve. San Francisco argues that the proposed usage pricing rules will not link the cost of providing system reliability with locational revenues. Instead, San Francisco states, PG&E will insulate its market power for generation from its Hunters Point and Potrero Units. In addition, San Francisco points out that the application does not address the relationship between the proposed usage charge and existing contract pricing provisions.

Similarly, Willie L. Brown, Mayor of San Francisco is concerned that the locational congestion price to San Francisco ratepayers will be an unacceptable surcharge during periods of higher loads in San Francisco. Mayor Brown asserts that PG&E has an obligation to remedy its past failure to provide adequate facilities to avoid the congestion charges. Mayor Brown urges the Commission and the California Commission to take actions to ensure that San Francisco citizens do not have to pay discriminatory prices for reliable electric service.

SMUD argues that the ISO Governing Board, rather than the Companies, should establish criteria for creating zones. Some intervenors dispute the Companies' use of historical data, which may not accurately reflect ISO operations, to determine zones. The ISO Users group argues that the zone proposal is inconsistent

<sup>140/</sup> See also, Protests of Southern Cities, AEW, and Palo Alto.

with the Companies' market power studies, in which SoCal Edison and SDG&E claimed such constraints do not exist.

CMUA and Southern Cities support granting the ISO discretion to define new criteria for zone boundaries. These parties contend that the ISO needs flexibility to change criteria and to operate the congestion management protocols. CMUA argues that the Companies' proposal has two flaws: a) historic data are insufficient sole basis to determine initial zones; and b) the numerical criterion to evaluate zone splits is inappropriate. Similarly, Palo Alto fears that the congestion zone boundary definitions could significantly affect its costs. It contends that the filing contains insufficient data or detail on zone definitions.

The ISO Users Group states that the Commission must retain the right to approve the creating of new transmission zones. They note that additional zones would introduce more pricing complexity. ISO Users Group opposes the proposal to use a simple formula to determine the need for new zones.

CalEnergy and EPUC are concerned that the usage charge will create rate uncertainty. EPUC opposes use of commodity price information to manage transmission congestion, contending that this information should remain secret. EPUC would prefer the reallocation of access over congested interfaces through private trades.

A number of intervenors argue that the pricing proposal, which includes transmission access fees plus usage charges, will constitute impermissible "and" pricing. 141/

The California Commission recommends that the locational marginal costs of losses and congestion be allocated only to generators. 142/ The California Commission states that its recommendation is consistent with its goal that end-users see a single clearing price.

The California Commission states that charges for congestion should be assessed only to those generators who are scheduling in the direction of a constraint. In a related matter, the California Commission maintains that scheduling coordinators failing to maintain their schedules should be held responsible for any increased costs (particularly congestion costs) caused by such deviations. The California Commission recommends that the application be amended to permit the ISO to establish congestion management zones in a shorter timespan.

141/ See, e.g., Protests of SMUD, CMUA, and Southern Cities.

142/ See California Commission Supplemental Comments at 10-11.

The California Commission recommends that TCCs be unbundled to separately provide for TCCs for congestion and TCCs for losses. The California Commission states that since losses can be self-provided, unbundling them from the congestion TCCs will provide greater flexibility to the market. The California Commission also states that all TCC trading should be posted on the ISO's OASIS system that the ISO be granted more authority to develop mechanisms to assign and calculate losses for specific generators.

In response to the comments of intervenors, the Companies argue that their proposal presents a reasonable and necessary delineation of zones for initial ISO operations, that the ISO may change these zones (and the criteria for creating zones) if circumstances dictate, and that the Companies used the best available data which should reflect initial transmission loading levels.

The Companies contend that San Francisco has failed to challenge the analysis contained in their application and that if San Francisco is correct that its zone is not constrained, no usage charge would result. Moreover, in response to San Francisco's contention that the higher costs in their zone is a reliability cost that should be treated as an ancillary service, the Companies state that the result is the same. The usage charges and ancillary services charges would be determined in the same manner. In addition, the Companies note the California Commission's requirement that the PX set a single clearing price, and state PG&E's intention to pursue measures to mitigate market power in that zone.

The Companies dispute the ISO Users Group's claims that the zones presume the existence of constraints which SDG&E and SoCal Edison had claimed not to exist in their market power filing. According to the Companies, there is no inconsistency because SDG&E and SoCal Edison are both located in a single southern zone which has no constraints. The Companies state that they did not presume constraints to exist, but used historical data set forth in Appendix F of the application.

The Companies contend that the rate uncertainty CalEnergy and EPUC fear will not be significant, since there are only four zones, three of which are in the northern part of the state. According to the Companies, any rate fluctuations will reflect the fact that users of the grid must pay the cost of any significantly congested interfaces that they use. Also, the Companies note that the Commission permits opportunity cost pricing, and that grid users may purchase financial contracts, such as TCCs, to hedge price uncertainty.

The Companies reject the notion that the usage charges, in combination with the proposed access fees, results in impermissible "and" pricing. According to the Companies, "and" pricing occurs where a company collects through its transmission rates both its embedded revenue requirement plus incremental transmission costs. The Companies assert their proposal differs from "and" pricing proposals for two reasons: First, the usage revenues would be credited against the transmission access charge. This, they claim, ensures that the transmission owners will not recover amounts exceeding their revenue requirements. Second, the Companies assert that the Commission has stated "and" pricing violates comparability between native and non-native load customers. The Companies point out that their proposal would apply the same pricing rules all grid users, and would not violate comparability.

In response to the California Commission's Supplemental Comments, the Companies state that the marginal cost of losses and congestion will be allocated to scheduling coordinators, and then to generators and loads as applicable. The Companies also state that the ISO will have the authority to assign and calculate losses for specific generators.

The Companies clarify that under their proposal, end-use customers will see a single market clearing price, as required by the California Policy Decision. Specifically, the Companies state that the price for energy could represent an average of the price paid throughout the individual utility distribution companies.

In response to the California Commission's recommendation that the ISO be provided the flexibility to create new congestion zones in a shorter time frame than proposed, the Companies state that the ISO would have the authority to modify the criteria for establishing or reversing boundaries, and that the ISO can create new zones after the first six months of operations. The Companies also agree with the California Commission that ISO grid users that mitigate congestion (counter-flow schedulers) should be exempt from congestion pricing.

The Companies clarify that their proposal for TCCs is for congestion costs alone and does not include the cost of losses as part of the TCC. Companies state that given the relatively small magnitude of losses, they do not see a need to define a separate TCC for losses.

In its October 21, 1996 comments, NCPA opposes the California Commission's recommendation that usage charges be allocated only to generators. NCPA states that this proposal will not work without entirely restructuring the bid system proposed in the PX. Specifically, NCPA argues that if generators have to bear load-end congestion costs in addition to generation-

end congestion costs, "the structure would become asymmetrical and would have to be rethought from scratch." In response to the California Commission's suggestion that the ISO be afforded more flexibility in creating new zones, NCPA states its preference for nodal pricing, which it believes to be more economically accurate. NCPA supports the California Commission's recommendations that TCCs not be retained by transmission providers, that TCCs for congestion and losses be unbundled, and that TCCs be posted on the bulletin board.

Azusa and Banning respond to the California Commission's recommendation that time of use pricing be used by questioning whether that would be in addition to transmission congestion pricing. Azusa and Banning request that the Commission consider whether the transmission congestion charges will adequately reflect the cost consequences of peak use of constrained transmission facilities. Moreover, Azusa and Banning contend that counter-flows during peak periods should be encouraged, not deterred.

In its October 21 comments, San Francisco states that the comments at the Commission Staff's September 12 and 13 technical conference confirmed its view that the proposed congestion criteria are fatally flawed and that the transmission congestion in San Francisco cannot be mitigated by redispatch. San Francisco urges the Commission to defer consideration of the congestion criteria, including treatment of congestion costs and allocation of congestion revenues, delineation of the congestion zones, and assignment of TCCs, until the Companies provide additional information in Phase II. San Francisco sees no merit to the California Commission's recommendation that the ISO be given greater latitude in creating new congestion zones or sub zones, because in its view, the zone structure is inherently flawed.

CalEnergy comments that the Restructuring Legislation is silent regarding the Companies' congestion pricing proposal. CalEnergy restates its position that locational marginal pricing violates Commission's Transmission Pricing policy. CalEnergy states that the Companies' proposal to credit congestion revenues to offset transmission access charges does not cure this defect. Therefore, CalEnergy requests that the Commission either reject the usage charge proposal or subject the proposal to strict scrutiny as a market-based rate.

#### Commission Response

The Companies propose to charge customers transmitting power between zones a congestion-based usage charge reflecting the congestion-caused difference in spot energy prices in the two zones. When there is no congestion, no usage charge would be levied. The Companies contend that the usage charges will help

send the proper price signals for the siting of generation and for the efficient expansion of the transmission grid. According to the Companies, if congestion costs exceed the cost of new transmission facilities that would alleviate the transmission constraint, there will be an incentive for affected parties to make an investment in such facilities.

The proposed congestion usage charge would reflect the economic cost of using a congested transmission path, as long as the energy prices reflect competitive market forces and are not manipulated by sellers exercising market power. The Commission will address the market power question in deciding on the Companies' request for market-based pricing for energy. Thus, the Companies' proposal to establish some form of congestion-based transmission usage charges is a positive step towards alleviating transmission congestion efficiently, and consequently comports with the Commission's eighth ISO Principle. 143/ However, our acceptance of this proposal is preliminary. The Phase II filing must demonstrate that (1) market power in the energy market can be adequately mitigated; and (2) the proposal will not result in "and" pricing.

We are concerned that the Companies' proposal to assess a transmission congestion usage charge, when combined with an embedded cost access charge, would violate the Commission's policy prohibiting "and" pricing. 144/ In the Transmission Pricing Policy Statement, we stated our opposition to "and" pricing. Under this policy, customers should not be required to pay prices equal to the sum of embedded and opportunity costs. Instead, we permit "or" pricing, whereby prices would be set at a level equal to the higher of embedded costs or opportunity costs (capped at incremental expansion costs).

Initially, the Companies propose that the ISO would rebate congestion revenues back to the owners of the transmission facilities that are congested. The transmission owners would use the rebates as credits to their revenue requirements and thereby reduce access charges. The Companies' proposal, however, does not describe the specific method by which individual customers

143/ Order No. 888 at 31,372.

144/ See Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public Utilities Under the Federal Power Act, Policy Statement, FERC Stats. & Regs., Regs. Preambles Jan. 1991-July 1996 31,005 at 31,146 (1994), order on reconsideration. 71 FERC 61,195 (1995).

would receive the benefits of the rebates. 145/ As part of proposing such a mechanism, the Phase II filing must ensure that the proposal to require customers to pay both an embedded cost access charge and a congestion charge that reflects opportunity costs does not violate our prohibition against "and" pricing.

The Phase II filing must also describe how transmission customers will be able to secure firm transmission capacity or rights between particular receipt and delivery points.

In addition, the Companies propose to establish zones for the purpose of assessing congestion usage charges and for determining energy prices as well as a mechanism for redrawing zone boundaries. We accept the proposed zones for purposes of the ISO's initial operations. However, the proposal to aggregate large numbers of buses into zones and to establish zonal energy prices for generators may create inefficiencies, if there is chronic congestion within a zone. If zones are to be used for assessing congestion charges, they must be based on accurate congestion boundaries. Incorrect boundaries could create unfair and inefficient advantages as between the PX and bilateral transactions. Whenever there is congestion within a zone, averaging the energy price will likely put the PX at a disadvantage in the low cost side of the constraint, since customers in a low cost side will want to avoid the PX's above market prices. Conversely, bilateral deals will be at a competitive disadvantage in the high cost side. 146/ As experience is gained with the operation of the ISO and PX, it may be appropriate to reassess zonal boundaries as well as the Companies' proposal for dealing with these issues.

Moreover, the PX's average price will discourage any price-sensitive customers in the high cost side of the zone from reducing their purchases. If customers in the high cost side were charged the actual market clearing price for that side, they

145/ The Commission expects that the proposal will provide similar rights to all wheeling customers, including those who wheel through or out of the ISO grid.

146/ For example, assume generators in the southern side of the zone are paid 2 cents per kWh while generators in the northern side of the zone are paid 4 cents. If customers throughout the zone are charged the average of the two prices (3 cents), customers in the south with a choice will prefer to buy energy from bilateral deals at 2 cents rather than buying energy from the PX at 3 cents. At the same time, northern customers will prefer to buy from the PX at 3 cents rather than pay the 4-cent price from bilateral deals.

would face a stronger incentive to reduce their purchases and conserve on high cost generation.

We find the Companies' zonal pricing proposal unclear with regard to the prices that buyers would pay for energy from the PX. For example, it is not clear whether, during periods of transmission congestion, the Companies propose that PX buyers in different zones would pay the same price or different prices for energy. On the one hand, the Companies' Market-Based Rates filing suggests that when transmission congestion exists, PX buyers in different zones would pay different prices for energy.<sup>147/</sup> On the other hand, the same filing states that the Companies will average the cost of energy among the customers they serve.<sup>148/</sup> The Companies state in their comments that end users served by different companies in different zones throughout California will pay the same energy price. We are concerned that the distortions associated with zonal energy prices may be compounded to the extent that all customers throughout California pay the same energy price. Additionally, in the Phase II filing, the ISO should explain in detail, using examples, how new congestion zones will be created. The filing should explain the benefits and problems with shortening the time period over which the zones can be established. For example, would a shorter time period for creating a new congestion zone reduce the attractiveness or effectiveness of TCCs? If congestion zones are eliminated or changed, will the corresponding TCCs be rendered useless? Moreover, will the creation (and removal) of congestion zones be subject to gaming if certain generators could be advantaged or disadvantaged by the rapid establishment or dissolution of new zones?

The Companies argue that their congestion pricing proposal will help to relieve transmission constraints efficiently. The Commission sees two aspects to the issue of relieving transmission constraints. In the short run, before transmission facilities can be expanded, one issue concerns how to relieve constraints by reducing the demand for the capacity in a way that effectively allocates the constrained capacity to its most efficient uses. As explained above, we are persuaded that congestion pricing is one way to allocate constrained capacity efficiently.

A second issue concerns whether parties will have an incentive over the long run to build adequate additional transmission capacity where warranted to relieve transmission constraints. Under a congestion pricing mechanism, some parties who receive congestion revenues may have an incentive to oppose

<sup>147/</sup> See PX filing at 47.

<sup>148/</sup> See PX filing at 48, fn. 28.



grid expansions in order to continue receiving congestion revenue. (Of course, where congestion is sufficient to warrant expansion, there will also be parties who will benefit from expansion.) The way that congestion revenues are rebated may affect the incentives of various parties to oppose or support transmission expansions.

To address our concerns that there be adequate incentives to expand the grid efficiently, the Phase II filing should explain exactly how congestion revenues will be rebated and to whom. In addition, the Phase II filing should address the merits of alternative mechanisms for rebating congestion revenues, especially with reference to the incentives they create for encouraging or discouraging efficient expansions.

### C. Losses

The California Commission urges the Commission to adopt a policy that locational congestion and losses be collected solely from generators, not from end-users. That way, load would see a single, market-clearing price, as provided in the California Commission Decision.

The California Commission also argues that power flow programs may not accurately calculate losses. There is not individual metering, so the programs proposed to assign losses to specific generators may not be accurate. The California Commission states that the ISO should have the authority to develop alternate appropriate mechanisms to assign and calculate losses for generators. It may have to add metering equipment or calculate average losses on an hourly basis.

In response, the Companies state that their proposal does not directly involve the generators; rather the ISO will charge scheduling coordinators for losses attributable to the generators they represent, and will charge scheduling coordinators for the congestion attributable to the generators and loads they represent. The Companies state that the scheduling coordinators would then allocate these costs to the generators or loads as applicable. The Companies argue that end-user customers would still see a single market-clearing price, because the prices for energy would be averaged.

### Commission Response

The Commission directs the ISO to file in Phase II a detailed description of its proposed loss calculation methodology. Specifically, the ISO should explain (using numerical examples) how it will determine the location specific, marginal impact of each generator on total system losses. The ISO should explain whether this calculation considers the location of, and distance to, the loads served by the individual

generators. The ISO should also reconcile and explain how the ISO-administered loss charge will work in conjunction with the marginal losses factored into the PX determined marginal generator price. For example, Section 6.4.3. of the PX Application states that:

A zone hub price will be calculated based on the last winning bid at the bus of the last winning marginal generator. The zone hub price will reflect the winning bidder's price adjusted by its marginal losses to the zone hub. [emphasis added]

Will the marginal losses referenced in the above section account only for the transmission losses between the generator and the point at which it interconnects with the ISO grid? If so, how will the transmission losses that occur over the ISO grid be taken into account? In addition, the ISO should explain how the designation of certain generating units as reliability must-run will impact the loss calculation. Specifically, how will the status of those units affect the ISO's determination of their marginal impact on total system losses?

The ISO should also explain the use and calculation of load-based "loss clusters" 149/, and how these loss characteristics will be factored into the price of electric energy.

#### D. Ancillary Services

Under the proposal, the ISO would provide a range of ancillary services, which the Companies state are consistent with Order No. 888. The Companies propose that system protection, replacement reserves, load following (regulation), energy imbalance, and loss compensation ancillary services be priced through an ancillary services auction at market-based rates. The Companies have also proposed to secure certain other ancillary services under long-term contracts solicited under competitive bids (e.g., black start and reactive power services). The Companies propose to designate certain generating units as reliability must-run generating units that will provide necessary support services to the transmission system at cost-based rates. 150/ To the extent a particular ancillary service can be unbundled, separately metered and controlled, the Companies state that a scheduling coordinator may self-provide that service or may purchase that service from a third party.

149/ ISO Application at 101.

150/ See, e.g., PG&E's market power study at 19.

While the Companies' proposed list of ancillary services appears reasonable and consistent with those outlined in Order No. 888, the Companies have failed to provide a market analysis to support their request for market-based ancillary services rates. In Order No. 888, the Commission decided to consider ancillary services rate proposals on a case-by-case basis. We also included some general guidance on ancillary services pricing principles. With respect to pricing these services at market-based rates, Order No. 888 states the following:

The fact that we have authorized a utility to sell wholesale power at market-based rates does not mean we have authorized the utility to sell ancillary services at market-based rates.

In the absence of a demonstration that the seller does not have market power in such services, rates for ancillary services should be cost-based and established as price caps, from which transmission providers may offer a discount to reflect cost variations or to match rates available from any third party. [151/]

Therefore, the Phase II filing should define and analyze each separate ancillary service market with respect to the potential market power of each Company. The market power studies will be necessary especially as they pertain to the designated congestion zones. Ancillary services not proposed to be subject to market-based rates, or that are not feasibly provided through a day-ahead market (i.e., reactive power), should be identified and a cost-based rate for such a service should be proposed in the Phase II filings. This would include generating units designated as reliability must-run units and which may have market power under certain system operating conditions.

In addition, the Phase II filing should address the feasibility of and operating guidelines for self-providing the requisite ancillary services. The filing should clearly explain how such services will be accounted for and verified, and should explain the extent to which the ISO will have control of the generator providing the service. For example, would the ISO have direct control over any generator that provides an ancillary service, or would the ISO have to go through a scheduling coordinator in order to direct the control of that unit? Would the ISO directly control a generator in another control area and would the owner of that generator have to supply dynamic scheduling equipment? The Phase II filing should also explain in detail how the ISO will procure and ensure the provision of installed reserves, since the provision of this service is not necessarily consistent with a daily or short-term market auction.

The Phase II filing should also include an explicit proposal designating those units that "must-run" for reliability reasons. The proposed list should consider all generation technically capable of providing the requisite services, and not be limited to the Companies' generation. All evaluation criteria should be clearly outlined and all choices should be clearly and explicitly explained.

### 3. Transmission Expansion

Commenters generally contend that the ISO should have increased responsibilities and authority with respect to transmission expansion. For example, CalEnergy, APPA, Southern Cities, and San Francisco recommend that the ISO should propose, build and own expansion facilities. CalEnergy argues that the ISO should be able to build the capacity itself, have binding authority to direct any transmission owner to do it, or delegate the obligation to an RTG with such authority. According to CalEnergy, the proposal to separate transmission operations from planning and construction of expansion facilities would freeze the system in its current status, and would add an additional step of ISO review to the already complicated process.

APPA contends that the Companies' proposal expands the Companies' market power and eliminates future planning, because expansion facilities would not be built until congestion becomes significant enough to force participants to determine if they need to pay for the additions rather than congestion charges.<sup>152/</sup> APPA recommends allowing any participant to construct and own network upgrades, to include the associated revenue requirements in its own contribution to the ISO, and to spread the costs to all grid users. Alternatively, APPA proposes that the ISO be authorized to construct expansion facilities, which then could be owned by all ISO members proportionately. CMUA recommends that expansion be under the direction and authority of the ISO to limit the exercise of market power.

Additionally, CMUA argues that the transmission owners' obligation to build and their right to own transmission must be preserved.

CMUA and Southern Cities argue that the proposal to roll-in costs to the revenue requirement of the transmission owner on which the expansion is constructed (and to recover such costs only from the expanding transmission owner's customers) creates an incentive to oppose expansion projects. Southern Cities supports giving the ISO authority to require or construct itself economically efficient transmission expansion facilities. CMUA supports the Companies proposals to use an impartial body to

<sup>152/</sup> See also, Protests of Southern Cities and CMUA.

determine whether a project is economically justified and whether the project costs should be assigned or rolled in; and to coordinate with the affected RTGs.

CMUA argues that the test for and obligation surrounding future interconnections to the ISO grid is unclear. CMUA fears that new generation may be connected that displaces municipal-owned generation, even after the municipal utility may have paid for expensive upgrades and other facilities. CMUA disputes the Companies' position that it would violate the principle of independence for the ISO to own or sponsor transmission facilities, stating that the Companies assume economically justifiable facilities will be built without ISO involvement. 153/

CEERT states that the Commission should first defer to the existing WRTA RTG process, as provided under the Commission's ISO Principle No. 8. 154/ CEERT proposes that the ISO board create a standing Planning committee separate from the ISO itself to prepare studies or proposals and to provide public outreach in order to satisfy California environmental and other siting issues. Thus, the ISO should have input into, but not control, the expansion process. Otherwise, the ISO would have a commercial function requiring regulation. It should be a public process not controlled by utilities or sub-group of market participants.

NCPA argues that allowing the Companies to select the facilities to be constructed would enhance their vertical market power on behalf of their generation or distribution affiliates.

Metropolitan comments that the transmission expansion provisions must be clarified so that the ISO's authority for reliable operation of the transmission grid is preserved. The Commission should place authority for expansion with the ISO, not with transmission owners, since expansion in one location will affect the grid elsewhere. Metropolitan is concerned that the proposed expansion provisions may conflict with existing bilateral arrangements and with the WRTA governing agreement.

M-S-R requests clarification and revision of the proposed transmission system expansion provisions to ensure reliability and to protect the interests of both participants and non-participants. M-S-R points out that the Commission's ISO principles encourage coordination between the ISO and the RTG. M-S-R believes that this should be required and states that the

153/ Southern Cities support these positions.

154/ Order No. 888 at 31,732.

Companies need to provide the details how such coordination will be accomplished.

The California Commission supports proposals to afford the ISO authority to plan, build, and collect revenues for incremental transmission.

In response, the Companies argue that the intervenors comments are based on misconceptions of the expansion proposal and should be rejected. The Companies oppose recommendations to afford the ISO authority to propose, build or own system expansions because the ISO is not a market participant. Also, the Companies argue that the types of financial decisions the ISO would have to make would be inconsistent with its non-profit character and would compromise its independence from the market. The Companies also reject APPA's suggestion that anyone should be allowed to construct system expansion facilities, because the transmission owners should engineer the transmission upgrades.

The Companies also dispute the criticism that transmission owners have little incentive to expand the grid, stating that it is the market participants who use the ISO grid that would have such incentives. The Companies note that the Commission has already rejected NCPA's argument that allowing transmission owners to select the facilities to be built would enhance their market power. Moreover, the Companies note that all system expansions will be coordinated through the ISO or RTG.

In response to comments that the ISO and WRTA responsibilities may conflict, the Companies disagree, noting that no specific conflicts have been identified. The Companies do not dispute CMUA's statement that the Companies' proposal should not affect the right of any party to build transmission facilities, or the obligation of the transmission owner to build transmission expansions, if requested. The Companies state that existing rights are not disturbed, and the transmission owners retain the obligation to build system upgrades.

#### Commission Response

The Companies propose that certain principles govern the expansion of the transmission system. For example, the obligation to expand the transmission system would be with the transmission owner and not with the ISO. The Companies envision that expansion of the system for economic reasons will be driven by the marketplace and that the obligation to expand the transmission system for reliability reasons should remain with the transmission owner.

The Commission has some concerns with the Companies proposal. It is the Commission's opinion that the ISO should play a more active role in transmission expansion decisions. As

the sole administrator of the transmission system and the entity responsible for the reliability of the transmission grid, the ISO should have a clear and prominent role in the transmission expansion process. The Commission notes the Restructuring Legislation also contemplates such a role for the ISO. 155/

In the Phase II filing, the ISO should submit a transmission expansion process that contemplates a more active role for itself in transmission system planning, regional coordination, and transmission system expansion. However, to the extent the ISO's role in transmission system planning and regional transmission coordination overlaps with that of WRTA, the Phase II filing should explain in detail what responsibilities each entity is better suited to perform.

The Phase II filing also should include an explanation as to how non-IOW project sponsors will be able to secure the necessary permits and certificates necessary to undertake a transmission expansion project, subject to state law, including how such entities will be able to exercise the right of eminent domain.

The Companies have requested that the Commission give deference to state and RTG determinations regarding the need for certain transmission expansions. We have stated in the past that we will give appropriate deference to decisions reached by Commission-approved RTGs. To the extent the Phase II filing proposes that such organizations oversee the transmission expansion process, the Commission will give deference to such determinations.

Finally, while the Companies may be correct that their proposed transmission expansion process may eliminate the need for Section 211 requests, the Commission notes that all parties eligible to seek a Section 211 order will retain their right to file a Section 211 request with the Commission.

## 5. Functions and Operations

A number of intervenors raised concerns over the over-generation protocols, the treatment of regulatory must-take and reliability must-run generating units, and the provision of certain ancillary services. 156/ Intervenors also support the formation of the ISO and PX as separate entities. 157/

155/ Restructuring Legislation at 345-350.

156/ See CEERT Protest at 5-7.

157/ See, e.g., ISO User Group Protest at 3, and EPUC Protest at 8-9.

The California Commission states that charges for congestion should be assessed only to those generators who are scheduling in the direction of a constraint. In a related matter, the California Commission maintains that scheduling coordinators failing to maintain their schedules should be held responsible for any increased costs (particularly congestion costs) caused by such unapproved schedule changes. The California Commission also recommends that the application be amended to permit the ISO to establish, on an ongoing basis, congestion management zones over a shorter timespan.

The Cities of Anaheim, Colton, and Riverside and Azusa and Banning respond that it is unclear what are the increased costs of scheduling deviations. While these parties do not object to a definition of such costs as the costs the ISO incurs to deliver or absorb the specific megawatt hours of the deviation. However, these customers disagree with a definition that would require the deviating customer to cover any increases in the market clearing price resulting from the deviation times the entire volume of transactions during the hour of the deviation. This interpretation would, in their view, bankrupt a small market participant. Instead, these parties recommend either: (a) requiring the ISO to establish a minimum deviation band in absolute megawatt terms; or (b) capping the deviation charge payable by a customer at some rate applicable to the excess over scheduled amounts.

The Companies agree with the California Commission that scheduling coordinators should have an obligation to match their actual dispatch with their schedules. The Companies state that Scheduling Coordinators will be charged or paid for hourly schedule changes based on the market conditions at the time.

#### Commission Response

As noted above, the Companies agree with the California Commission that scheduling coordinators should have an obligation to match their actual dispatch with their schedules, and state that Scheduling Coordinators will be charged or paid for hourly schedule changes based on the market conditions at the time. We believe the Companies have adequately addressed the California Commission's concerns, and no modifications are required.

#### Scheduling Protocols

The Commission realizes that the development of the Scheduling Protocols is a work in progress and most of the protocol details have not yet been developed. While the information provided in the filing is helpful, the lack of detail makes it difficult for the Commission to provide guidance at this time. Once the actual details of the various protocols have been completed and filed in Phase II, the Commission will be able to



evaluate the actual procedures of the various entities at that time.

#### Scheduling Coordinators

The Commission accepts, on an interim basis, the Companies' proposal to establish rules for scheduling coordinators. To the extent that scheduling coordinators that aggregate loads and/or generation for others own or control facilities used for the sale for resale of electric energy in interstate commerce, they will be jurisdictional. At the direction of the ISO, scheduling coordinators will be responsible for coordinating and allocating reductions in load as well as altering generation schedules. Similarly, scheduling coordinators will allocate billings among their aggregated loads and make payments to designated generators and will schedule deliveries to or from other scheduling coordinators. Scheduling coordinators will also be responsible for tracking and settling all intermediate trades, such as those with power marketers.

Accordingly, the Phase II filing must include a detailed description of the technical and financial requirements to qualify as a scheduling coordinator. In particular, the Commission will need more detail on all the operational roles that the scheduling coordinators will perform and their interaction with the ISO. This detail will be necessary in order for the Commission to evaluate the applicability of our regulations for such entities.

The Commission orders:

(A) The Companies' applications for authorization to establish an independent system operator and power exchange and their application to transfer facilities to an independent system operator are hereby conditionally granted on a preliminary basis, as discussed herein.

(B) The untimely motions to intervene in this proceeding are hereby granted.

(C) TANC's motion to strike is hereby denied.

(D) SDG&E's notice of withdrawal is conditionally accepted, as discussed herein.

(E) The motions to consolidate Docket Nos. EC96-19-000, ER96-1663-000 and Docket No. EL96-48-000 are denied.

(F) The motions to dismiss the applications are denied.

(G) The Companies and the ISO shall make their Phase II filing by March 31, 1997, as discussed herein.

By the Commission.

( S E A L )

Lois D. Cashell,  
Secretary.

APPENDIX A

TIMELY MOTIONS TO INTERVENE IN DOCKET NO. EC96-19-000 1/

American Public Power Association (APPA)  
American Wind Energy Association (AWEA)  
Amoco Energy Trading Corp. and Amoco Production Company (Amoco Energy)  
Arizona Electric Power Cooperative, Inc. (AEPCO)  
Atlantic Richfield Company (Atlantic Richfield)  
Bonneville Power Administration (BPA)  
Mayor Willie L. Brown \*  
CalEnergy Company (CalEnergy)  
California Department of General Services (DGS)  
California Department of Water Resources (DWR)  
California Department of Water Resources, City and County of San Francisco, and the Western Area Power Administration, Sierra Nevada Region (Government Entities)  
California Farm Bureau Federation (Farm Bureau)  
California Industrial Users (CIU)  
California Manufacturers Association and California Large Energy Consumers Association (CMA/CLECA)  
California Municipal Utilities Association (CMUA)  
Public Utilities Commission of California (California Commission)  
CalResources LLP (CalResources)  
Center for Energy Efficiency and Renewable Technologies (CEERT)  
Chevron U.S.A., Inc. (Chevron)  
Cities of Anaheim, Colton, and Riverside, California (Southern Cities) 2/  
Cities of Azusa and Banning, California (Azusa and Banning) 3/  
City and County of San Francisco (San Francisco)  
City of Burbank, California (Burbank)  
City of Eureka (Eureka)\*  
City of Glendale, California (Glendale)  
City of Oxnard, California (Oxnard)\*  
City of Palo Alto, California (Palo Alto) 4/  
City of Pasadena, California (Pasadena)  
City of Redding, California (Redding)  
City of Santa Clara, California (Santa Clara) 5/  
City of Vernon, California (Vernon)  
Coalition of California Utility Employees (CUE)  
Coalition For A Competitive Electric Market (CCEM)

- 1/ An asterisk indicates the filing of comments not accompanied by a motion to intervene.
- 2/ Southern Cities adopt the positions of CMUA.
- 3/ Azusa and Banning adopt the positions of CMUA.
- 4/ Palo Alto supports the positions of TANC, NCPA and CMUA.
- 5/ Santa Clara supports the positions of TANC, M-S-R and CMUA.

Coalition For A Competitive Electric Market, et al. (ISO Users Group) 6/  
 Cogeneration Association of California (CAC)  
 Continental Power Exchange, Inc.  
 Electric Clearinghouse, Inc. (Clearinghouse)  
 Electric Generation Association (EGA)  
 Electricity Consumers Resource Counsel (ELCON) and American Iron and Steel Institute (AISI) (collectively, Industrial Consumers) 7/  
 Electricity Producers and Users Coalition (EPUC) 8/  
 Heartland Energy Services, Inc. (Heartland)  
 Imperial Irrigation District (Imperial)  
 Independent Energy Producers Association (IEP)  
 Lassen Municipal Utility District (Lassen)  
 Los Angeles Department of Water and Power (Los Angeles)  
 Metropolitan Water District of Southern California (Metropolitan)  
 MidAmerican Energy Company (MidAmerican)  
 Mock Energy Services (Mock)  
 Modesto Irrigation District (Modesto)  
 M-S-R Public Power Agency (M-S-R) 9/  
 National Mining Association, The Center for Energy and Economic Development, and Western Fuels Association, Inc. (Mining Association)  
 National Rural Electric Cooperative Association (NRECA)  
 New York Mercantile Exchange (NYMEX)  
 New York Power Pool Member Systems (NYPP)  
 Northern California Power Agency (NCPA)  
 Pacific Gas Transmission Company (PGT)  
 Pan-Alberta Gas, Ltd. (Pan-Alberta)  
 PECO Energy Company (PECO)  
 Power Fuels, Inc. and Union Pacific Fuels, Inc. (PFI and UPFI)  
 Public Service Electric and Gas Company (PSE&G)

- 6/ ISO Users Group consists of the Coalition for a Competitive Electric Market, Mock Energy Services, Agricultural Energy Consumers Association, Electricity Consumer Resource Council, and American Iron and Steel Institute .
- 7/ The Chemical Manufacturers Association originally joined in Industrial Consumers' motion to intervene, but later withdrew.
- 8/ EPUC is an ad hoc group representing Amoco Production Company, Amoco Energy Trading Company, Atlantic Richfield Company, CalResources, LLP, Chevron U.S.A., Inc., Cogeneration Association of California, Mobil Oil Corporation, Shell Martinez Refining Company, Texaco, Inc., Unocal Corporation, and Union Pacific Fuels, Inc.
- 9/ M-S-R acts on behalf of Modesto Irrigation District and the Cities of Santa Clara and Redding, California.

Powernet Corporation (Powernet)  
Sacramento Municipal Utility District (SMUD)  
Salt River Project Agricultural Improvement and Power District  
(Salt River)  
Shell Martinez Refining Company (Shell)  
Southern California Gas Company (SoCal Gas)  
Texaco, Inc. (Texaco)  
Transmission Agency of Northern California (TANC)  
Tucson Electric Power Company (Tucson)  
Turlock Irrigation District (Turlock) 10/  
Union Oil Company of California DBA UNOCAL (UNOCAL)  
United States Department of Energy (DOE)  
Utah Association of Industrial Energy Users (UIEU)  
Utilicorp United, Inc. (Utilicorp)  
Utility Consumers' Action Network (UCN)  
Utility Resource Management Group (URM)  
Watson Cogeneration Company (Watson)  
Western Area Power Administration (Western)  
Western Power Group, Inc. (WPG or Western Power) \* 11/

10/ Turlock generally agrees with CMUA's positions.

11/ WPG is an owner and operator of qualifying facility generation assets in California.

APPENDIX B

LATE MOTIONS TO INTERVENE IN DOCKET NO. EC96-19-000

AES Pacific, Inc. (AES)  
American Forest & Paper Association (AFPA)  
California Cogeneration Council (CCC)  
California Retailers Association (CRA)  
Council of Industrial Boiler Owners (CIBO)  
Dupont Power Marketing, Inc. (Dupont)  
New Mexico Industrial Energy Consumers (NMIEC)  
Northern Arapaho Tribe  
PacifiCorp  
PanEnergy Power Services, Inc. (PanEnergy)  
Portland General Electric Company (PGE)  
Toward Utility Normalization (TURN)

TIMELY MOTIONS TO INTERVENE IN DOCKET NO. ER96-1663-000

American Public Power Association (APPA)  
American Forest & Paper Association  
American Wind Energy Association (AWEA)  
Amoco Energy Trading Company and Amoco Production Company  
Atlantic Richfield Company  
Bonneville Power Administration  
CalEnergy Company, Inc. (CalEnergy)  
California Department of General Services  
California Department of Water Resources (DWR)  
California Farm Bureau Federation  
California Industrial Users  
California Manufacturers Association and California Large Energy  
Consumers Association (CMA and CLECA)  
California Municipal Utilities Association (CMUA)  
CalResources LLP  
Chevron U.S.A. Inc.  
Coalition for a Competitive Electric Market, et al. (ISO Users  
Group) 1/  
Cities of Anaheim, Colton and Riverside, California (Southern  
Cities) 2/  
Cities of Azusa and Banning, California (Azusa and Banning) 3/  
City of Glendale, California  
City of Palo Alto, California (Palo Alto) 4/  
City of Pasadena, California  
City and County of San Francisco (San Francisco)  
City of Santa Clara, California (Santa Clara) 5/  
City of Vernon, California (Vernon)  
Coalition of California Utility Employees  
Cogeneration Association of California (Cogeneration Coalition)  
Continental Power Exchange, Inc.  
Energy Users and Producers Coalition (EPUC)  
Governmental Entities 6/

- 1/ The ISO Users Group consists of the Coalition for a Competitive Electric Market, Mock Energy Services, Agricultural Energy Consumers Association, Electricity Consumers Resource Council, and American Iron and Steel Institute.
- 2/ Southern Cities adopt the positions of CMUA.
- 3/ Azusa and Banning adopt the positions of CMUA.
- 4/ Palo Alto supports the positions of TANC, NCPA and CMUA.
- 5/ Santa Clara supports the positions of TANC, M-S-R and CMUA.
- 6/ Governmental Entities are DWR, San Francisco, and Western Area Power Administration, Sierra Nevada Region.

Heartland Energy Services, Inc.  
 Imperial Irrigation District  
 Industrial Consumers 7/  
 Lassen Municipal Utility District  
 Los Angeles Department of Water and Power (LADWP)  
 Marron, Reid & Sheehy, L.L.P.  
 Metropolitan Water District of Southern California (Metropolitan)  
 M-S-R Public Power Agency (M-S-R) 8/  
 Mock Energy Services, LP  
 Modesto Irrigation District (Modesto)  
 National Rural Electric Cooperative Association  
 New York Mercantile Exchange  
 New York Power Pool  
 Northern California Power Agency (NCPA)  
 Pacific Gas Transmission Company  
 Pan-Alberta Gas Ltd.  
 PECO Energy Company  
 Power Fuels, Inc. and Union Pacific Fuels, Inc.  
 Public Utilities Commission of the State of California  
 (California Commission)  
 Sacramento Municipal Utility District (SMUD)  
 Salt River Project Agricultural Improvement and Power District  
 (Salt River)  
 Shell Martinez Refining Company  
 Southern California Gas Company (SoCal Gas)  
 Texaco Inc.  
 Transmission Agency of Northern California (TANC)  
 Tucson Electric Power Company  
 Turlock Irrigation District (Turlock) 9/  
 Union Oil Company of California  
 United States Department of Energy  
 UtiliCorp United Inc.  
 Utility Resource Management Group  
 Western Power Group (Western Power) 10/

7/ Industrial Consumers are Electricity Consumers Resource Council and American Iron and Steel Institute.

8/ M-S-R acts on behalf of Modesto Irrigation District and the Cities of Santa Clara and Redding, California.

9/ Turlock generally agrees with CMUA's positions.

10/ Western Power is an owner and operator of qualifying facility generation assets in California.



APPENDIX D

LATE MOTIONS TO INTERVENE IN DOCKET NO. ER96-1663-000

AES Pacific, Inc.  
California Cogeneration Council  
Center for Energy Efficiency and Renewable Technologies  
Council of Industrial Boiler Owners  
New Energy Ventures, Inc.  
New Mexico Industrial Energy Consumers  
Toward Utility Rate Normalization  
Utility Consumers Action Network  
Watson Cogeneration Company (Watson)